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ROYAL NAVAL BIRD WATCHING SOCIETY

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The British Trust for Ornithology

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NOTE:—Review of Observations of Seabirds. In view of the extensive number of reports a general review of observations in recent years is being undertaken to prepare an up-to-date statement which will appear in the next number of Sea Swallow.

Pomarine Skua (Stercorarius pomarinus) (Light phase)
Photo by Radio Officer E. L. MARCHANT

EDITORIAL

STATE OF THE SOCIETY

Fourteen new members joined during 1969/70, and the Associate Membership increased to fifty-three members. We welcomed the addition of six ships of the Fishery Protection Squadron which joined individually under Corporate Membership.

The Merchant Navy still offers scope for more recruits as is evident from the increasing interest in sea and land bird observations quoted in the Meteorological logs from ships at sea.

REPORTS FROM SEA

Both 1969 and 1970 have been extremely active years largely due to a constant flow of sea passage reports from a select few stalwarts. The ocean areas covered during the latter half of 1968 and during 1969 and 1970 have provided information of the distribution of sea birds not only confirming previous knowledge but supplying information in areas hitherto unreported by members of R.N.B.W.S.

In addition we have received most detailed reports from Lieut. P. J. Ford, R.N., covering his observations from H.M.S. Protector in 1966/67 when the ship was operating in sub-antarctic waters.

	1968	1969	1970
Number of "Sea Report Sheet" Passage reports—			
Seabirds	30	27	38
Number of "Census Sheet" Passage reports—			
Seabirds	18	22	25
Number of "Sea Report Sheet" Passage reports—			
Landbirds	22	26	27
Number of birds examined in the hand—			
Seabirds	20	15	15
Landbirds	21	11	11

The totals do not include the day to day monthly Ocean Weather Ship Reports.

THE CARE AND FEEDING OF BIRDS WHICH LAND IN A DISTRESSED STATE ONBOARD BRITISH OCEAN WEATHER SHIPS

During 1968 R.N.B.W.S. drew the attention of the International Council for Bird Preservation (British Section) to the large number of birds which land in an exhausted state onboard these ships during migration and die through lack of suitable food and shelter cages which can be placed in the warmth until they have recovered. Many examples have occurred of Wheatears, Snow Buntings, Wagtails, Meadow Pipits and larger birds such as Turnstones, Dunlin, Redwings, and even Geese, Merlins, Kestrels and a Red-footed Falcon.

The matter was referred to in the I.C.B.P. President's letter and a number of kind donations were received. The project was put into action, details of varieties of suitable feeds, a design for a suitable holding cage and a grant made to each ship for the purpose. First reports have already shown its potential value. The crews not only express appreciation for the donations but quote cases of the recovery of numbers of birds which otherwise would have died.

OIL POLLUTION AT SEA—DANGER TO WILDLIFE

Many shipowners already advise their ships to report the presence of oil slicks at sea. To assess the danger to seabirds in particular R.N.B.W.S. has been invited to co-operate, and members at sea can give valuable assistance in whatever part of the world serious oil slicks are observed. The information and means of transmission of information is as follows:—

(a) Where oil pollution at sea is observed the date, position and extent should be passed through the Master of the ship to G.P.O. Coastal Radio for H.M. Coastguards, in British waters; and in the case of other countries abroad, to the coastal authorities of the country.

(b) Where oiling or mortality of birds is observed irrespective of the necessary presence of oil, the date, position, details of species of birds and direction of recent prevailing winds should be passed personally by the observer, quoting R.N.B.W.S. member, by first available air mail direct to Dr. David Lea, Hon. Secretary, Advisory Committee on Oil Pollution at Sea, R.S.P.B., The Lodge, Sanby, Bedfordshire.

CO-OPERATION WITH ORNITHOLOGICAL SOCIETIES

PERSIAN GULF BIRDWATCHING SOCIETY

This very active Society has already published a guide to the birds of Bahrain totalling over two hundred species either resident or seasonal visitors. Less information is available to it on the status of seabirds in the Gulf, and R.N.B.W.S. members at sea visiting the Gulf have been invited to forward sea records direct to the Hon. Secretary of the Society Headquarters, Land Forces, Gulf, Bahrain (British postal services—B.F.P.O. 63). R.N.B.W.S. members have already sent back records and further records would be much appreciated. Major Gallagher would be delighted to welcome any member visiting Bahrain.

DIPLOMATIC SERVICE ORNITHOLOGICAL SOCIETY

The recently formed British Diplomatic Service Ornithological Society has furnished R.N.B.W.S. with its list of present membership. These comprise persons on the staffs of British Embassies and High Commissions in many quarters of the world. Unfortunately in most cases their members will be stationed too far inland for contacts to be made by our seagoing members. A list of names where opportunities may arise has been published in R.N.B.W.S. Bulletins. The Society's Hon. Secretary is Mr. Garth Pettitt, Trade Policy Department, Foreign and Commonwealth Office, London, S.W.1.

FORWARDING TO THE BRITISH MUSEUM (NATURAL HISTORY) SEA AND LAND BIRD SPECIMENS THAT ARE FOUND DEAD OR DIE ONBOARD

The British Museum (Natural History) would welcome the receipt from R.N.B.W.S. members, British Ocean Weather Ships, and indeed any British Merchant Ship of specimens of sea and land birds that die by mishap onboard. Although the Museum is quite well off for skins except for rare specimens the same cannot be said for its Spirit and Skeleton collections where a long series of each species is needed for the study of anatomical variations, and many examples

often of common species are still required. Only birds with gross tissue damage (e.g. loss of a head) should be discarded. The following action should be taken:—

PRESERVATION. Deep Freeze is the best method in ships, and birds must be left intact (i.e. not gutted). They must be placed in a *well* sealed plastic bag before being put in deep freeze otherwise they will "freeze-dry."

LABELLING. A label must be attached to the specimen, written in PENCIL, showing identification if known, date, position of recovery in lat. and long., sender's name and home address and R.N.B.W.S. if a member.

ONWARD TRANSMISSION. The specimen in its plastic bag should be well padded, placed in a stiff cardboard box to prevent crushing, and addressed to Dr. P. J. K. Burton, Bird Section, British Musem (Natural History), Cromwell Road, London, S.W.7. Postage will be refunded.

NOTE: If ships are returning to U.K. in a reasonable time it will be best to defer posting until arrival. In other cases the sender should use his discretion as to the most direct postal route.

LARGE SPECIES. Large species where packaging would be difficult should be retained until return to U.K. when details should be addressed to Dr. P. J. K. Burton, Bird Section, British Museum (Natural History), Tel. 01-589-6323 Ext. 252, who will arrange transportation.

DECENTRALISATION OF CERTAIN RESPONSIBILITIES IN THE DAY TO DAY MANAGEMENT OF THE AFFAIRS OF R.N.B.W.S.

To Members of R.N.B.W.S. it will be well known, but to others who may read this journal less so that all aspects of the routine administration, ornithological recording and editorial have been undertaken by the Chairman/Editor and Honorary Secretary/Honorary Treasurer. The overall scope of the interests undertaken by the Society has increased to an extent that as from 1st January, 1971, certain aspects of the work are now being undertaken by those assistants quoted under the Executive Committee in this issue of Sea Swallow.

So far as the editorial aspect is concerned however all completed sea report forms, extracts of bird reports from meteorological logs, and Ocean Weather Ship returns should continue to be forwarded direct to the Chairman and Editor, together with any notes, articles for Sea Swallow and photographs or negatives which members may send. The Chairman will act as the source for decentralising material to the assistants concerned. In the case of demands for blank sea report forms however members should forward their requests direct to Captain E. F. Aikman, quoting in all cases the numbers and types of blank forms desired and the home or other address for forwarding. It is stressed that the quantities should be limited to meet only short term demands.

G. S. TUCK, *Editor.*

SEA AND LAND BIRD OBSERVATIONS FROM BRITISH OCEAN WEATHER SHIPS IN THE NORTH ATLANTIC DURING 1968 AND 1969

Observations have continued for the fifth and sixth successive years with daily counts of all species observed logged during each period on station. R.N.B.W.S. extends its warmest thanks to the following observers, all of whom have other duties to perform, for their long periods of observation and detailed records: R. B. Dyer, R. J. Burness, C. I. Griffiths, P. K. Kinnear, E. D. Macdonald, N. G. Cheshire, R. C. L. Aram, J. Hayes.

In addition H.M.S. Hecla, Lt. Cdr. R. A. Wilson, R.N., was surveying the Lousy Bank, 60°N, 15°W, not far from Station India, from 22nd April to 30th May, 1968, and his records have been included in the 1968 Seabird Table.

Separate Seabird and Landbird Tables have been prepared covering each year 1968 and 1969 when the following Stations were manned:—Station Alpha (62°30′N, 33°W), India (59°N, 19°W), Juliet (52°30′N, 20°W) and Kilo (45°N, 16°W).

PRESENTATION OF OBSERVATIONS—1968/1969—SEABIRDS TABLES A

Seabirds:—Total number of each species per period. Symbols used: * = very large numbers, 50 to 100 per day. Avd = average daily count. a = adult, i = immature where applicable. b = blue phase (Fulmars). In the case of Fulmars and Kittiwakes in particular, and to a lesser extent Gulls, the same birds may appear day after day at stationary ships. The numbers give an indication of the relative abundance of the species and over the different months of the year.

A stage has now been reached when little is to be gained by commenting separately on the observations of each station. The general summary which follows therefore compares the pattern of results from 1965 to 1969.

SUMMARY OF EVIDENCE—1965-1969

FULMAR PETRELS. Very few have been observed at KILO at any season indicating the approach to the southerly limit of their oceanic distribution. This is not an area where fishing boats and offal might create a locally attractive zone. At the other three stations large numbers occur at all the stations at all seasons, somewhat less at JULIET, and do not diminish appreciably during the breeding season. Daily counts at ALPHA and INDIA over the years are often between 60 to 100+, and at JULIET between 40 to 70, but were considerably less in 1968.

KITTIWAKES. From December to May large numbers occur at all Stations but they are generally only about half as numerous as Fulmars. This excludes KILO where Fulmars are always very scarce in comparison with other stations. During June and July however Kittiwakes become scarce at all stations, while the number of Fulmars changes little, and between May and September a greater proportion of immature Kittiwakes are present. As an example, at KILO in January 1966, Kittiwakes averaged 45 per day (total per period 1085), while only a total of 15

OCEAN WEATHER SHIP OBSERVATIONS –1968– SEABIRD TABLE A.

	OCEAN STATION ALPHA 62° 30'N. 33° 00' W. 300 miles WXS Iceland				OCEAN STATION INDIA 59°00'N. 19°00'W 250 miles South of Iceland						H.M.S."HECLA" Survey of Lousy Bank, 60°N.15°W				OCEAN STATION JULIET 52°30'N. 20°00'W 360 miles WXS Ireland			OCEAN STATION KILO 45°00'N. 16°00'W 350 miles W.N.W. cape Finisterre	
	Feb 1-12	May 24 June 16	Jan 9 Jan 30	Feb 25 Mar 19	June 3 June 23	July 18 Aug 8	August 10 August 21	Sept 1 Sept 24	Oct 19 Nov 7	Nov 10 Nov 24	April 22 May 30	Jan 7 Jan 28	Mar 18 April 8	April 11 May 2	July 15 Aug 7	Aug 31 Sept 20	Oct 1-12 16-Nov 6	April 1 April 12	April 15 May 10
NUMBER OF DAYS	12	24	22	23	21	22	12	25	20	15	39	22	23	22	24	22	35	12	26
Great Shearwater	-	-	-	-	180 av.9 d	50 av. 3 d	6	8	-	-	-	-	-	-	69	541 (4-8 Sept)	224 29	-	-
Sooty Shearwater	-	-	-	-	1	10	3	13	1	-	-	-	-	-	10	8	1	-	-
Manx Shearwater	-	-	-	-	2	1	3	-	-	-	3	-	2	12	-	2	-	-	-
Wilson's Storm-Petrel	-	-	-	-	3	-	-	-	-	-	-	-	-	-	2 (? Brit.S.P.)	43	39(? Brit.S.P.) 57(? Brit.S.P.)	-	90
Leach's Storm-Petrel	-	-	-	-	2	-	-	-	2	-	-	-	1	-	1 ?	-	5	-	-
Fulmar Petrel	492 av.30 d	672 av.28 d	*1795(26b) av.81 d	398(3b) av.18 d	*1140(2b) av.57 d	*1330 av.60 d	*1235 av.103 d	*1414 av. 59 d	*1350(18b) av.67 d	355 av.24 d	200	368(6b) av.17 d	261 av.12 d	265 av.12 d	478 av.20 d	151 av.7 d	553 av.16 d	-	7
Kittiwake	48 av.4d	194(a&i) av.8 d	538 av.24 d	980(40i) av.45 d	52(31i) av.26 d	47(5i) av. 2 d	28(9i)	49(32i)	966 av.48 d	67(10i) av.41 d	-	*1949(10i) av.88 d	991(129i) av. 45 d	*1700(386i) av.77 d	35(4i) av. 1 d	7(4i)	89(76i) av.2.d	6	11
Gannet	-	5	-	2	31	-	4	4	2	-	7	2	1	26	8	-	3	-	5
Great Skua	-	3	-	6	9	4	6	31	9	1	10	2	24	57	3	16	11	5	4
Pom: Skua	-	17	-	-	4	3	-	3	2	-	6	-	-	13	1	4	26	-	59
Arctic Skua	-	2	-	-	3	7	1	7	1	-	2	-	-	2	10	7	1	-	3
Long-tailed Skua	-	-	-	-	11	4	1	2	-	-	5	-	-	1	2	-	-	-	1
Gr. B.B.Gull	14	8	14	7	1	2	1	5	51	9	2	25	21	5	-	49	10	1	-
Lr.B.B.Gull	-	14	-	2	37	2	3	109	-	-	19	-	-	35	-	-	7	-	13
Herring Gull	-	-	-	-	-	-	1	-	1	-	-	-	4	2	-	1	-	4	2
Glaucous Gull	19	-	1	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-
Iceland Gull	35(av.3 d)	3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Common Gull	-	-	-	-	-	-	-	1	3	-	-	-	-	-	-	-	1	-	-
Black-headed Gull	-	-	-	-	1	-	1	-	12	-	2	-	-	20	1	-	-	-	-
Sabine's Gull	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	1	1	-
Ivory Gull	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terns	-	1	-	-	1(arctic)	38(arctic)	37(sp)	29(sp)	-	-	3(sp)	-	-	-	1(sp)	5(arctic.Tn)	-	-	-
Little Auk	-	-	-	-	-	-	-	-	-	1	6	2	5	-	-	-	-	-	-
Razorbill	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common Guillemot	-	? 5	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brunnich's Guillemot	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puffin	-	2	-	-	1	2	-	-	-	-	2	-	-	-	-	-	-	-	-

OCEAN WEATHER SHIP OBSERVATIONS –1969– SEABIRD TABLE A.

	OCEAN STATION ALPHA 62°30'N. 33°00'W. 300 miles WXS Iceland			OCEAN STATION INDIA 59°00'N. 19°00'W. 250 miles South of Iceland						OCEAN STATION JULIET 52°30'N. 20°00'W. 360 miles WXS Ireland				KILO 45°00'N. 16°00'W. 350 miles WNW Finisterre	
	March 3-27	June 11 July 6	December 1-12	Jan 19 Feb 12	March 9 April 1	July 20-26	August 7-29	Sept 22 Oct 16	Dec 27 Jan 17(70)	Jan 16 Feb 8	April 1-13	April 26 May 19	October 13-27	November	Nov 15 Dec 6
NUMBER OF DAYS	25	26	13	25	24	7	23	25	22	24	14	24	15	22	22
Great Shearwater	-	20	-	-	-	1	64	225	-	-	-	-	87	7	20
Sooty Shearwater	-	-	-	-	-	1	4	7	-	1	-	-	-	-	-
Manx Shearwater	-	-	-	-	-	8	7	1	-	-	6	-	-	-	-
Wilson's Storm-Petrel	-	-	-	-	-	5(sp)	-	-	-	-	3(sp)	-	-	-	-
Leach's Storm-Petrel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Fulmar Petrel	1954 (3,b) av.78d	951 (49,b) av.36d	163 av.12d	1241 (13,b) av.49d	710 (42,b) av.39d	460 av.65d	1247 (164,b) av.54d	1645 (34,b) av.66d	1193 (18,b) av.54d	1685 (59,b) av.70d	425 av.30d	1444 (26,b) av.60d	221 av.14d	864 (54,b) av.38d	45
Kittiwake	155 (23,i) av.6d	6 (5,i)	52 (15,i) av.4d	401 (28,i) av.16d	585 (242,i) av.32d	15 av.2d	330 (121,i) av.14d	279 (91,i) av.11d	435 (8,i) av.20d	2405 (49,i) av.100d	1118 (94,i) av.80d	1944 (1311,i) av.81d	207 (33,i) av.14d	249 (87,i) av.11d	677 (119,i) av.31d
Gannet	-	15(4,i)	-	5	4	7	6(2,i)	8(3,i)	7	4	2	21(6,i)	-	-	6(2,i)
Great Skua	-	3	-	-	7	1	8	22	-	9	14	14	6	-	50
Pom. Skua	-	4	-	-	-	-	-	2(1,d)	-	-	-	29	4	-	-
Arctic Skua	-	8	-	-	2	-	2	-	-	-	-	1(D)	5	-	-
Long-tailed Skua	-	4	-	-	-	-	4	1	-	-	-	-	-	-	-
Gr. B.B.Gull	4(1,i)	19(11,i)	-	14(5,i)	11(6,i)	1	16(3,i)	5(2,i)	17(8,i)	14(4,i)	-	19	2	34(30,i))	24(17,i)
Lr. B.B.Gull	2	-	-	-	2i	3	-	2	1i	-	-	2	-	-	-
Herring Gull	-	-	-	-	-	-	-	10i	1i	-	-	28(4,i)	-	-	6i
Glaucous Gull	13(7,i)	2i	-	2(1,i)	4(3,i)	-	-	-	-	20(5,i)	-	-	-	4i	1i
Iceland Gull	7(3,i)	-	-	3	-	-	3i	-	5(4,i)	-	-	-	-	-	-
Common Gull	-	-	-	-	-	1	4	-	-	-	-	-	-	-	5
Black-headed Gull	-	15(9,i)	-	-	-	-	2	2	-	-	-	5	-	-	-
Sabine's Gull	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Ivory Gull	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terns	-	1sp	-	-	-	-	75sp	5sp	-	-	-	-	-	-	-
Little Auk	-	6	-	-	2	-	-	1	-	-	3	-	-	1	-
Common Guillemot	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-
Puffin	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Little Gull	-	-	-	-	-	-	1i	-	-	-	-	-	-	-	-

Fulmars was observed. In July, 1965, no Kittiwakes were observed at KILO, and in 1968 between April 1 to May 10 only 17 were seen. At INDIA in 1966 Kittiwakes had dropped from a total of 1127 (av50d) in April to 75 (av3d) in May/June, 42 (av2d) in June/July to one only in July. In 1968 Kittiwakes had fallen to 52 in June, 47 in July, with similar small numbers at JULIET. At ALPHA and INDIA similar reductions occurred in 1969.

GREAT SHEARWATERS. One or two were seen at ALPHA in late June/early July 1965 but this appears to be exceptional. Further east and south at INDIA they have normally begun to appear in quite small numbers in July, through August to September. At INDIA in 1965, 15 appeared in August. In 1966, 15 from mid July to September. In 1967, one per day from July to early September. In 1968 an early influx of 180 occurred in mid June, thereafter 56 July/August, 8 in September. In 1969, 225 in September. By the end of September almost all disappear, while larger concentrations occur at JULIET. This suggests that many birds probably do not travel as far north as INDIA. JULIET—In 1965, 225 mid September. In 1966, 836 mid August to early September, 1755 mid September to early October, and 4,426 during October. In 1967 a great surge of 3,782 Great Shearwaters occurred between early and late October. In 1968, 69 birds from late July to early August, 541 in September and 253 by the end of October, thence moving southwards. KILO—In 1967, 60 in late September and 206 in October. In 1969, 20 Nov./Dec. We have no records of birds earlier in the season at KILO.

SOOTY SHEARWATERS. ALPHA—One or two only have been observed in June/July. It seems doubtful if any but stragglers penetrate so far north and west. INDIA—Quite small numbers, principally in August and September. In 1965, 20 in August. In 1966, 3 in July, 18 mid August to mid September. In 1967, 20 in August. In 1968, 13 in August, 13 in September. Similar small numbers have occurred at JULIET between June and October. KILO—No sightings have occurred over the years.

CORY'S SHEARWATERS. These have been observed at KILO only, certainly from July to October. They have probably been present in other spring and September months when no Weather Ship has been on this Station.

MANX SHEARWATERS. Only 2 have ever been recorded at ALPHA. At INDIA and JULIET only small numbers, less than 10 per month, have been reported between April and September. However in 1965, 28 were counted at JULIET in April, and in 1968, 14 in April. More records are needed to establish their principal line of approach and departure from their breeding areas.

STORM-PETRELS. Identification of species is usually difficult in the weather conditions prevailing. LEACH'S STORM-PETREL. At ALPHA only 2 Leach's Storm-Petrels, and no other species, have ever been observed, and only an occasional one or two at INDIA and JULIET. Only one has been recorded at KILO, in 1969. WILSON'S STORM-PETRELS. At ALPHA, none. At

INDIA, 3 in June once. JULIET—1966, 350 Storm-Petrels close round ship in September/October. One came onboard and was identified as Wilson's. In 1967, none before October when 63 were counted, definitely not Leach's. In 1968, 43 Wilson's were observed in September, and 96 species uncertain in October but probably the same. KILO—At this Station the records of Wilson's Storm-Petrels are quite definite. In 1965, 132 July/August. 1967, 545 September/October. 1968, 90 April/May. BRITISH STORM-PETRELS. This species does not appear at ALPHA, nor does it seem to occur with any certainty at INDIA or JULIET. More information is necessary from all Stations.

GANNETS. Gannets have been observed at all Stations at all seasons of the year, but only in ones or twos at a time.

SKUAS. ALPHA—The northward passage occurs during May/June. In this area Pomarine Skuas predominate; 1965, 38. 1966, 20. 1967, 26. 1968, 17. 1969, 4. Great Skuas have occurred on a smaller scale; 1965, 10. 1966, 11. 1967, 8. 1968, 3. 1969, 3. Long-Tailed Skuas; 1965, 10. 1966 to 1968, nil. 1969, 4. Arctic Skuas; 1965, 2. 1966, 2. 1967, nil. 1968, 2. 1969, 8. The southward passage occurs during the latter half of August; in 1967, all four species were recorded, 12 Great, 2 Pomarine, 8 Arctic and 10 Long-Tailed. INDIA—The northward passage tends to spread over a longer period starting in April and commencing with Great Skuas; In 1966, 61 April, 16 May/June. In 1967, 83 April/May. In 1968 no ship was on station in April/May, but 6 were counted in March, and 9 in June. Arctic Skuas; 1967, 21 May. 1968, 3 June. Long-Tailed Skuas; 1966, nil. 1967, 2 May. 1968, 11 June. The southward passage at INDIA of all four species occurs from August to the end of September, when Great Skuas predominate, Arctic Skuas showing counts of one-third those of Great Skuas, Pomarine and Long-Tailed Skuas in lesser numbers. JULIET—The northward passage shows Great Skuas arriving first in late March when the other Skuas have not yet appeared. The main passage of all four Skuas occurs between April and June. Great Skuas; 1965, 36 April. 1966, 55 April. 1968, 24 March (no other Skuas); 57 April. 1969, 28 April/May. Pomarine Skuas; 1964, 42 May/June. 1968, 13 April/May. 1969, 29 May. Arctic Skuas; 1964, 6 May/June. 1968, 2 April/May. 1969, nil May. Long-Tailed Skuas; 1964, 41 May/June (most unusual). 1968, 1 April/May. 1969, 19 May. The southward passage at JULIET occurs principally from September to mid October. As an example during this period in 1966, 75 Great Skuas, 26 Pomarine Skuas, 17 Arctic Skuas and 6 Long-Tailed Skuas were counted. Similar proportions have occurred in previous years. KILO—This Station is considerably further south. Great Skuas have appeared northward bound in March/April, Pomarine, Arctic and Long-Tailed Skuas in April/May, Pomarine Skuas predominating. The southward passage reaches its climax in mid October.

Note:—Great Skuas tend to dally around Weather Ships for several days while other species pass onwards which accounts to some extent for the greater number of Great Skua counts recorded.

GULLS. ALPHA and INDIA—Glaucous and Iceland Gulls appear at both stations during the winter and early spring months, at INDIA only occasionally, but sometimes one each day at ALPHA. Only on two occasions in four years have Glaucous Gulls appeared at Juliet. In 1969, 20 in January, and 4 in November. In 1968, one Iceland Gull appeared in January for the first time. Herring Gulls have very rarely been recorded at ALPHA, but have appeared at all seasons in small numbers over the years at INDIA, JULIET and KILO. Great Black-Backed Gulls and Lesser-Black-Backed Gulls have been seen at all stations, the Great Black-Backed Gulls easily predominating, particularly in winter months. Sabine's Gulls and rarely Ivory Gulls have been observed at ALPHA, and Sabine's Gulls at INDIA in June and July.

TERNS. These create a constant difficulty in identification at sea. ALPHA—Very few observed. INDIA and JULIET—Insufficient data available covering the northward passage. The southward passage appears to occur between mid August and mid September. INDIA. 1964, 13 Arctic Terns late August. 1966, 114 "Comic Terns," August. 1967, 153 Arctic Terns, late August. 1968, 38 Arctic Terns, 66 "Comic Terns" August to late September. 1969, 80 "Comic Terns," August to October.

AUKS. ALPHA—Little Auks occurred in small numbers each year except in 1968. JULIET—Occasionally in April/May. In 1966, 124 in April. Guillemots and Puffins have occurred at ALPHA almost every year, more frequently in May and June, and also at INDIA. Absent at JULIET and KILO.

LAND BIRD OBSERVATIONS—1968/1969—LAND BIRDS TABLES B

The "Feed the birds" scheme quoted in the Editorial had not come into full operation in 1968 although our observers had already made advanced provision for food and shelter cages. A study of the tables will show the value of providing facilities for both food and shelter for birds which are tired and weak when they land on the ships; a number of birds have rested and fed for several days before taking their departure. The gale force weather conditions which occurred on 30th and 3st October, 1968 at INDIA and JULIET give an indication of the mortality amongst landbirds at sea. Of some 40 Redwings which landed onboard almost all were blown off the ship and perished in the sea. There is always the expectation of unusual visitors to quote Grey Lag Goose, White-Fronted Goose, Long-Eared Owl, 2 Peregrine Falcons, Bluethroat. Kestrels are regular visitors, and the other birds shown in the tables have all been recovered onboard many times in past years.

Note:—The symbol *d.d*=died onboard. *x*=Full examination form completed.

EXTRACTS FROM OBSERVERS' INDIVIDUAL REPORTS—SEABIRDS 1968

ALPHA (R. B. Dyer), 10th February. An Ivory Gull seen to settle several times on the water which is unusual. The black legs, totally white appearance and dark tip and base of bill were seen clearly. (C. I. Griffiths), 25th May. One Black-backed Gull [species not quoted] showed well defined alternative black and white patches on its mantle [We have had previous reports of similar markings on the upperwings of Lesser Black-backed Gulls].

INDIA (C. I. Griffiths). Kittiwakes will dive, sometimes from a height of 25 feet, and submerge completely for meat scraps. The maximum depth seems to be from 12-15 ins. 28th January. Fulmars also seen for the first time to submerge completely, but usually "up ending" like ducks when feeding. (R. B. Dyer), 18th August. 3 Manx Shearwaters followed in the ship's wake for a considerable time contrary to their usual custom.

JULIET (R. J. Burness). Between 12th and 24th January 5 oiled Kittiwakes were counted amongst the others. (C. I. Griffiths), 25th July. One Great Shearwater was showing curious antics, gliding upside down, water ski-ing on feet and submerging as if attempting to remove parasites. (C. I. Griffiths), 4th August. A good view of a Long-tailed Skua on driftwood. It appeared to be pecking for sea lice.

1969
AN APPRECIATION AND EXAMPLES FROM THE WEATHER SHIP STATIONS

Each season brings unexpected experiences including the weather. Station INDIA in winter; "Heavy snow showers and 35 foot waves made observations difficult." But on 10th October it was sufficiently calm for small boat work; "Little Auk observed from the dinghy about a mile from the ship"—And all the time the food chain goes on The crustaceans eat the plankton and the fish eat the crustaceans. At the top of the pyramid hunts the whale, while the seabirds hover overhead. In May six Killer Whales passed close to the ship. "All birds," referring principally to Fulmars and Kittiwakes, "rose into the air at their approach." Schools of Black Fish (Pilot Whales) were constantly in sight of INDIA. On the 8th, 9th and 10th of October over 500 were seen, and the daily count of Fulmars rose from 65 to 250.

Whales are not the only source of disturbance; Great Skuas, Glaucous Gulls, even Fulmars have been seen harassing other seabirds. At the end of March at INDIA; "A hundred Kittiwakes soaring and wheeling up to 200 feet, all birds silent." On 24th July a Sabine's Gull was identified flying in company with Kittiwakes, "forked tail noticeable, but bright white triangle behind the primaries the best distinguishing mark." On the last day of 1969 a pair of tired looking Gannets showed up. Every time they tried to settle they were harassed by "half a hundred" Fulmars. This was one of the days when a school of Black Fish was in the area.

And then there are the casualties. At Station ALPHA an imma-

OCEAN WEATHER SHIP OBSERVATIONS –1968– LAND BIRD TABLE B

OCEAN STATION ALPHA
62°30'N, 33°00'W
300 miles WxS ICELAND

MAY			
21	1	Swallow *(Hirundo rustica)*	dd. onboard 24hrs. Took no food,died.
25	1	Swallow	onboard 16hrs. Took no food, flew off.
30	9	Lapland Bunting *(Calcarius lapponicus)*	onboard 6m,3f. 2f taking seed and water, all flew off.
	1	Snow Bunting *(Plectrophenax nivalis)*	onboard. Flew off after short stay.
31	1	Dunlin *(Calidris alpina)*	onboard. Flew off after short stay.
JUNE			
1	6	Lapland Bunting	onboard 3m,3f. 4 left after 3hrs. 2 remained 36hrs taking seed and water.
	1	Wheatear *(oenanthe oenanthe)*	onboard 1f, brief visit.
	1	Wheatear	1m onboard 24hrs. No food taken.
	1	Lapland Bunting	Taking regular seed and water, onboard 10 days then flew off.
5	1	Dunlin	onboard 4 days. Took finely chopped fish,meat and water. Flew off June 9.
	1	Purple Sandpiper *(Calidris maritima)*	onboard 7 days. Took same food as Dunlin. Weak at first but quite well by end of stay.

OCEAN STATION KILO
45°00'N, 16°00'W
350 miles WNW. CAPE FINISTERRE

APRIL			
12	1	Kestrel. S.W. *(Falco tinnunculus)*	f. onboard
13	1	Song Thrush *(Turdus ericetorum)*	onboard
20	1	House Martin *(Delichon urbica)*	onboard
MAY			
1	1	Long-eared Owl *(Asio otus)*	onboard
	2	House Martins	onboard
	1	Swallow	onboard
2	1	House Martin	onboard
	1	Swallow	onboard

OCEAN STATION INDIA
59°00'N, 19°00'W
250 miles South of ICELAND

MAY			
19	20	Geese	N. flying high. Species uncertain
25	1	House Martin *(Delichon urbica)*	d.d. onboard
	1	Whimbrel *(Numenius phalopus)*	N.W. passed near ship
26	1	Whimbrel	Flew past
JUNE			
4	1	House Martin	onboard
	1	Wheatear	onboard
5	1	Wheatear	onboard
6	1	Dunlin	onboard
15	1	Swift	onboard
20	1	Whimbrel	onboard
AUGUST			
19	1	Meadow Pipit *(Anthus pratensis)*	X. onboard 3 hours
21	1	Sand Martin *(Riparia riparia)*	onboard 6 hours
27	1	Wheatear	X. d.d. Very exhausted.
SEPT			
1-3	2	Wheatears	Caught by ships' cat d.d.
10	1	Wheatear	onboard
	2	Turtle Dove *(Streptopelia turtur)*	onboard 24 hours taking seed
12-14	2	Wheatears	onboard for three days, taking seed
	1	White Wagtail *(Motacilla alba)*	onboard 7 hours
	c.40	Wagtail	s.p. Flew by in flock
19-23	7	Wheatears	onboard
	1	Snow Bunting *(Plectrophenax nivalis)*	onboard x. d.d.
OCTOBER			
22	4+	Redwings *(Turdus musicus)*	onboard
23	22	Redwings	onboard, at times
	1	Purple Sandpiper *(Calidris maritima)*	onboard
	1	Blackbird	m. onboard at times
	1	Snow Bunting	f. onboard
24	c45	Redwing	around ship, arrived from the North
	1	Snipe *(Capella gallinago)*	
	2	Golden Plover *(Charadrius apricarius)*	
25	1	Snipe	onboard at times
	2	Golden Plover	
	1	Snow Bunting	f. took rice
	2	Blackcap *(Sylvia atricapilla)*	1m,1f onboard all day
	30	Redwings	all onboard, took breadcrumbs
26-27	20	Redwings	Still onboard, feeding well
	1	Snow Bunting	Still onboard, feeding well
	1	Fieldfare *(Turdus pilaris)*	onboard
	1	Bluethroat *(Cyanosylvia svecica)*	m. onboard
OCT			
27	18	Redwings	Still onboard, feeding
	1	Fieldfare	Still onboard, feeding
	2	Starlings *(Sturnus vulgaris)*	onboard, feeding
28-29	4	Starlings	still onboard
	9	Redwings	remaining
	1	Black Redstart *(Phoenicurus ochruros)*	onboard
	1	Fieldfare	onboard
30	Gale Force wind NE Force 10		5 Redwings. d.d.
NOV			
2-4	1	Purple Sandpiper	onboard
	4	Redwing	onboard
	1	Grey Lag Goose *(Anser anser)*	onboard
5-7	1	Chaffinch *(Fringilla coelebs)*	m. onboard
	1	Song Thrush *(Turdus ericetorum)*	onboard
	4	Starlings	onboard one d.d. without feeding
8-17	1	Purple Sandpiper	X. d.d. very exhausted
	1	Tree Pipit *(Anthus trivialis)*	X. d.d.
	4	White fronted goose *(Anser albifrons)*	X. hand fed. onboard 20 hours
21	1	Purple Sandpiper	X. onboard 12 hours
	2	Redwing	onboard 16 hours
	1	Blackcap	X. onboard
	1	Black Redstart	X. d.d.

OCEAN STATION JULIET
52°30'N, 20°00'W
360 miles WxS IRELAND

APRIL			
16	1	House Martin	onboard
	1	Swallow	onboard dd
20	1	Turnstone *(Arenaria interpres)*	onboard
30	2	Wheatears	1m,1f, 1dd, No food taken
	3	Meadow Pipit	2dd. No food taken
	1	Knot *(Calidris canutus)*	onboard
MAY			
1	2	Swallows	
	3	Wheatears, 2dd	
	1	Curlew *(Numenius arquata)*	
AUG			
28	2	Meadow Pipits	onboard
SEPT			
3	1	Pied Wagtail *(Notacilla alba yarrelli)*	onboard
8	1	Reed Bunting *(Emberiza schoeniclus)*	f. onboard
9	1	Turtle Dove	Fed on oats,barley,lentils. Released on return to land
	1	Wheatear	onboard
19	1	Turnstone	onboard
	3	Wheatears	onboard
OCT			
22	2	Snow Buntings	onboard
23/24	2	Starlings	onboard
29	1	Starling	d.d.
30	1	Redwing	onboard, very weak, d.d.
31	1	Barnacle goose *(Branta leucopsis)*	flew by
	2	Mallard *(Anas platyrhynchos)*	flew by
	c40	Redwing	some on deck, rest blown away. Wind NE 9. some in sea.
	1	Snow Bunting	onboard
NOV			
2-5	3	Starling, 1 white Wagtail d.d.	
6-7	8	Starlings, two caught by cat.	
	1	Turnstone	onboard. d SE
29	1	Blackbird. female	
DEC			
20	1	Redwing	

OCEAN WEATHER SHIP OBSERVATIONS –1969– LAND BIRD TABLE B

OCEAN STATION ALPHA
62°30′N, 33°00′W
300 miles WxS ICELAND

MARCH 3-27		No land birds sighted
JUNE		
18	1 Greenland Wheatear *(Oenanthe. o. leucorhoa)*	f. onboard. No food taken
19	1 Swift *(Apus apus)*	did not land
24	1 Greenland Wheatear	f. onboard. No food taken
	1 Swift	did not land
	1 Water Pipit *(Anthus s. spinoletta)*	onboard, very weak, d.d.
	1 Ringed Plover *(Charadrius hiaticula)*	onboard, caged, ate boiled egg,drank water.
JULY		
2	1 Dunlin *(Calidris alpina)*	onboard, No food taken
DECEMBER 1-12		No land birds sighted

OCEAN STATION KILO
45°00′N, 16°00′W
350 miles WNW of CAPE FINISTERRE

NOV		
22	2 Starlings *(Sturnus vulgaris)*	onboard
24	1 Woodlark *(Lullula arborea)*	onboard, very weak, d.d.
	1 Snow Bunting *(Plectrophenax nivalis)*	onboard
	1 Blackbird	did not land
25	1 Skylark *(Alauda arvensis)*	onboard
26	1 Starling	did not land

OCEAN STATION INDIA
59°00′N, 19°00′W
250 miles South of ICELAND

MARCH		
17	1 Redwing *(Turdus musicus)*	onboard one hour
23	2 Redwings	onboard two hours
	1 Kestrel *(Falco tinunculus)*	f. onboard
24	1 Meadow Pipit *(Anthus pratensis)*	onboard
	1 Kestrel	f. as above, onboard again
	1 Long-eared Owl *(Asio otus)*	onboard
25	2 Kestrels	1a,1i.f, as above, both onboard, both fed well on raw lean steak and water
26	2 Kestrels	still onboard, feeding well
AUG		
20	1 Pied Wagtail *(Motacilla alba yarrellii)*	did not land
23	1 Turnstone *(Arenaria interpres)*	did not land
SEPT		
24	1 Meadow Pipit	did not land
OCT		
10	1 Wheatear	m, onboard, d.d.
11	1 Snow Bunting *(Plectrophenax nivalis)*	m, onboard six hours
12	1 Whinchat *(Saxicola rubetra)*	f, onboard, X
13	2 Whinchats	onboard four hours
	1 Snipe	onboard
DEC 27 - JAN 17		No land birds sighted

OCEAN STATION JULIET
52°30′N, 20°00′W
360 miles WxS IRELAND

JAN 16 - FEB 8		No land birds sighted
APRIL		
29	1 Swallow *(Hirundo rustica)*	onboard, caged and fed
30	1 Swallow	onboard, caged, d.d.
MAY		
5	4 Dunlin *(Calidris alpina)*	did not land
12	1 Dunlin	onboard,
20	2 Peregrine Falcons *(Falco peregrinus)*	onboard
21	1 Dunlin	onboard, no food taken
	3 House Martins *(Delichon urbica)*	onboard

ture Kittiwake couldn't take the heavy June rain;" Appeared to have lost all the oil out of its feathers. We caught it, dried it and caged it for a while." At Station KILO in November a Kittiwake was found on deck with a badly gashed shoulder. It was kept overnight and offered food. Next day after release it remained in the vicinity for three days, "pursued by other Kittiwakes when flying around" concludes the report.

So the common species are seen and counted and watched, and sometimes not so common. On 26th January at Station JULIET a Sooty Shearwater was positively identified, quite the wrong time of year for this species in that area.

Sometimes seabirds are seen apparently going places. At Station ALPHA on 13th June twenty-one Guillemots were sighted "flying in 'V' formation close to the water in a direct line from 240° to 080°. The course took them close to the ship but they kept formation and flew on. This course would take them from Southern Greenland directly towards Iceland." Three days later ten more were seen moving in the same direction.

RECORDS ON ATLANTIC OCEAN MIGRATION ROUTES OF WILSON'S STORM-PETRELS, OCEANITES OCEANICUS

By Captain W. F. J. Mörzer Bruyns

Observations plotted on charts give a quicker and better picture of the distribution of seabirds than many written pages full of numbers and positions. Because most ships follow the beaten tracks there are often too many blank areas to be able to draw definite conclusions. April, 1966, was a lucky exception as the author and two of his birdwatching colleagues, Capt. D. Stam and Chief Officer K. van Salwegter crisscrossed the South Atlantic on two usual and five unusual tracks.

The result is plotted in the accompanying chart, to which are added previous April crossings of the North Atlantic by the author and an additional one by Capt. Stam.

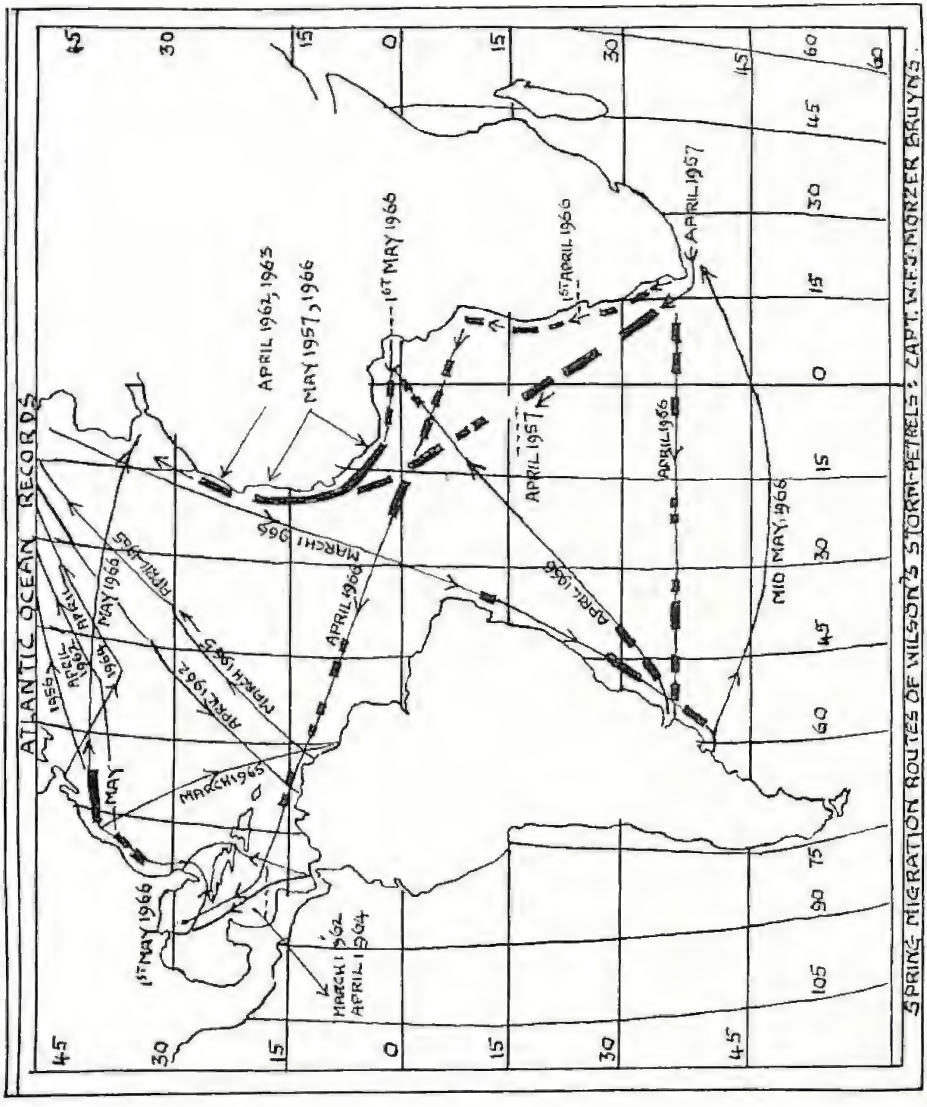
In the South Atlantic the regular track from Cape Town to Great Britain was also covered by Major W. W. A. Phillips during April/May, 1957, which completes the picture.

The time span is from the last week in March to half way through May. During March only very few single birds reached the northern latitudes. On the route Cape Town to Dakar which the author covered one month before Major Phillips the records were almost identical but petered out north of the Equator. The May track of Chief Officer van Salwegter, a great circle route from Argentine to Cape Agulhas, has been added to show that no Wilson's Storm-Petrels remain so far south.

Without jumping at conclusions it seems clear that there are two separate, rather well defined migration routes, one on the western side, probably including birds from extreme South American breeding grounds, and one on the eastern side. The first route appears to pass east of Haiti and seaward of the Bahamas towards Cape Hatteras.

Records in the Western Caribbean are very rare. The second route makes use of the cool Benguella and Canary currents off West Africa.

[A more detailed series of maps of the distribution of Wilson's Storm-Petrels throughout the world at different seasons compiled by Dr. Brian Roberts will be found in the Scientific Reports of the British Graham Land Expedition of 1934-1937, 1 : 141-194 W.R.P.B.]



THE MAGELLAN STRAITS

By Lieutenant P. J. Ford, R.N.

I first passed through the Magellan Straits during March, 1967. This voyage was repeated again in March, 1968, both voyages being made from east to west. When planning such a voyage one has many alternative routes from which to choose. The main considerations concern weather conditions and how long you wish your ship to remain in the close confines of piloted waters. Whichever route one decides upon, there can be no doubt that these waters offer impressive scenery, a multitude of wildlife and an historic background which offers added attraction.

The voyage along the Straits is made up of two distinct phases, the port of Punta Arenas acting as the point of division. As one approaches the Magellan Estuary from the Atlantic Ocean the first impression is of low lying land and offering little interest. Argentina and Chile share borders along the estuary, with the territories of Patagonia lying to the north and Tierra del Fuego to the south of the Straits. The lowlying land is mainly to the north and supports a large population of sheep. To the south lies Tierra del Fuego, a mountainous and tree covered area of which Charles Darwin wrote: "It is doubtful if a single acre of flat land exists in such an area." Tierra del Fuego means 'land of fire' and many columns of smoke support this derivation. At night the clouds reflect the reddened glow and one is reminded of distant tropical storms.

Many Europeans pioneered this area in bygone days. The large sheep farms (Estancias) and place names stand in memorial to their efforts. A careful study of the Admiralty chart of this area will bear witness to the endeavours of our own survey officers during the era of H.M.S. Beagle. The native population of the area are of Indian stock with little or no education. Their faces bear full witness to the harsh climatic conditions.

The channel leading up to Punta Arenas is wide and one needs only to take extra pilotage precautions on two occasions. The lowlying terrain gives way to hills which in turn gain in height as they extend away westward towards the Cordillera (Andes). There is invariably a strong westerly wind carrying a harsh warning down from the snow covered mountains that lie ahead

Southern Black-backed Gulls are the main travelling companions along the first phase of the voyage. The Gulls are usually in company with Giant and a few White-chinned Petrels. Great Skuas are present but do not pay much attention to the ship, being more intent on feeding along the low waterline with many Kelp covered mud flats. Parties of South American Terns often overfly the ship and can be seen feeding closer inshore. Wilson's Storm-Petrels inhabit the lower estuary. I recovered an exhausted bird during an earlier voyage to Punta Arenas; he remained onboard for five days and was successfully released when the ship re-entered the Atlantic Ocean.

It is not until the ship anchors at Punta Arenas that a greater variety of birdlife can be seen. The waters are rich in marine life and sea-food is a great attraction ashore. With the exception of Wilson's Storm-Petrel, all birds previously mentioned are to be seen in greater profusion within a five mile radius of Punta Arenas. Giant Petrels float buoyantly astern in company with Southern Black-backed Gulls,

the former not venturing into the inner harbour area. The Giant Skua is always alert and his marauding intent causes great distress to the Gulls. Long undulating lines of Magellan Cormorants can be seen flying between their resting and feeding grounds which are well clear of the port area.

I was able to explore quite a lot of the surrounding countryside, ranging from 20 miles westward along the coast to a point 70 miles inland. The roads are extremely primitive but provide excellent vantage points for observation. The inshore waters of the straits are full of thick Kelp that provide good feeding grounds for South American Terns and Gulls. Magellan Penguins venture to within five miles of the town and are usually seen singly along the pebbled beaches. I sighted many small Plover like waders but more positive identification was impossible since I did not possess a handbook. Seals were seen surfacing amid the Kelp and I believe these to have been young Elephant Seals.

The owner of a medium sized Estancia was most kind and offered me a most interesting inland journey in the vicinity of the FitzRoy Channel and Sono Skyring waters. The countryside is windswept and the sheep farmers fight an interminable battle against the ever spreading gorse and bracken. In such virgin areas wildlife is able to enjoy an undisturbed existence and would be the envy of our own conservationists. My greatest surprise was to see the South American Rhea, a species that is quite abundant in the area. My bird log shows notes of Herons, Ibis and many birds of prey. A silver-coated fox was seen and a Skunk, the latter aiding identification in the traditional manner! It is worth noting that there are no reptiles in the area, rather strange since some parts would seem ideally suited to them. The FitzRoy channel was teaming with rising fish and my host, who lived very close to the water, stated that the Killer Whale was not an infrequent visitor to the area.

On leaving Punta Arenas a Chilean Naval Pilot was embarked to assist the ship along the tenuous route that lay ahead. The Cordillera lay close before us, shrouded in ominous cloud but whetting the appetite of even the most disinterested voyager.

It is not long before the channel narrows and one gains the impression of being land-locked within a dark green box with an ugly grey sky forming the lid. The mountains are sheer with all but the lowest peaks hidden by the low cloud base. Below the cloud, small pockets of mist roll endlessly along the mountain slopes. Gnarled trees fight an endless battle to gain a foothold on the higher ground, their precarious attitudes bearing witness to the extreme climatic conditions that exist in the area.

Those responsible for pilotage have many hours of intense concentration ahead of them, the task being somewhat eased by good navigation marks and excellent Admiralty charts. Our Chilean pilot appeared most relaxed; we understood this confidence better when we learnt that in bygone years he had navigated a Sail Training Ship many times along these waters.

The scene in March is gentled by the summer thaw; even so there remains much snow on the mountains. Many glaciers exist and continue to shed falls of ice into the green waters. The melting snow forms numerous narrow waterfalls which appear as icicles hanging from the cloud base. During the 1967 voyage the weather deterior-

ated and we were forced to cut short our journey and head out into the Pacific Ocean. Those with less sensitive stomachs may not have agreed with this action but from a safety point of view the open sea is much preferable in a force 9 gale. We were more fortunate in 1968 and were able to travel much greater distances along the inland waterways in a north-westerly direction.

After leaving Punta Arenas the bird life becomes more profuse. Southern Black-backed Gulls are again constant travelling companions, their position astern being shared by more White-chinned and Giant Petrels. Magellan Diving-Petrels are frequently observed but the sightings are, in the main, fleeting. Of all the birds observed, the Black-browed Albatross is the most profuse. One particular area was made up of a maze of small, thickly wooded islands. The Albatross was to be seen everywhere and, although it was not located, a breeding ground must have existed nearby. Groups of Magellan Cormorants were often seen fishing along and between the many islands. The Great Skua is present and favours the Kelp patches for feeding.

Human life is sparse in this area and wildlife enjoys a truly natural environment. Two groups of Indians were seen, their presence betrayed by dug-out canoes and wisps of smoke emerging from the trees. It is most likely that the only contact these people have with the civilised world is the sight of an occasional ship passing by. Fish are abundant and must form the main diet of these nomadic people.

As one finally emerges into the Pacific Ocean a very exciting voyage lies astern and a feeling of having regained contact with the past. The scenery is breathtaking, the wildlife abundant and one's regard for the early explorer cannot fail to increase.

(Those who wish to know more of this area may care to consult a preliminary Smithsonian Manual, the Birds of Isla Grande (Tierra del Fuego), prepared by Philip S. Humphrey, David Bridge, P. W. Reynolds and Roger Tory Peterson, obtainable from the Smithsonian Institution, Washington, D.C. (411 pages and numerous sketches for identification, 1970), which supplements R. C. Murphy's classic "Oceanic birds of South America" with descriptions of the landbirds of the main island of Tierra del Fuego. W.R.P.B.).

VISITS TO THE ISLE OF MAY—FIRTH OF FORTH

By Captain E. F. Aikman

[Since Captain Aikman retired officially from the sea he makes many trips in his 16 foot Shetland sailing craft and annual voyages as navigator in the sail training ships "Malcolm Miller" and "Sir Winston Churchill." In early June 1968, and again in June 1969, and July, 1970, he and his son sailed over to May Island. This account, extracted from letters describing his visits, gives a brief picture of the sea birds which may be seen by a visitor during the breeding season. Ed.]

"Kirkhaven on the east side of the island is a most attractive natural harbour, just the sort of place one likes to find one's way into. There is a landing on the west side, but not the sort of place one can leave a boat unattended.

Of the gulls on my first visit on 5th June, 1968, Herring Gulls

were the most numerous, followed by Lesser Black-backed Gulls. The number of these on the grassy slopes was fantastic, and one had to watch with great care to avoid the eggs of both species. We also almost trod on an Eider Duck's nest containing three eggs so tightly did she sit.

On the cliffs on the southwest side of the island Kittiwakes, Guillemots and Shags were in the greatest numbers, followed by Fulmars and Razorbills. Puffins were few in comparison. A few Cormorants were seen but it seemed doubtful if they were breeding. The nest sites of Shags and to a lesser extent Kittiwakes were often accessible, both species allowing a close approach for photography without disturbance. The Shags would open their bills widely, emitting harsh grating sounds; some nests already contained young, while others were carrying nesting material, one with a piece of seaweed fully twice its own length.

On my second visit on 9th June, 1969, several Herring Gulls' nests contained chicks and eggs in the process of hatching, but in an area occupied by Lesser Black-backed Gulls the young had not yet hatched. On our earlier visit about four pairs of Great Black-backed Gulls had been observed but apparently had not nested. On this occasion two Eider Ducks' nests were found on higher ground with two eggs in each, one of which was hatching out, while on a small pond some thirty feet above sea level there was a party of one male Eider, thirteen females and seven ducklings. We saw few Puffins until late in the evening when a group of twenty to thirty were seen on the north-east side south of the old north lighthouse.

Shags and Kittiwakes, May Island, 1968

Our visits were primarily just to enjoy watching the sea birds at close quarters. I remember my difficulty of distinguishing between Guillemots and Razorbills under seagoing conditions. Observing these on the island and from a small yacht the dark brown colour and sharply pointed bill of the Guillemot compared with the black of the Razorbill and its compressed bill is easily recognisable.

In 1970 I again visited the island on 4th July, a month later than the previous year. Young Herring Gulls were in all stages from egg to active running amongst which were doubtless smaller numbers of young Lesser Black-backed Gulls. The Kittiwakes now had one or two chicks in many nests whilst in the previous June no nests contained any hatched young. Shags generally had two or three well fledged youngsters; in one nest there was also a length of nylon rope a foot long. Fulmars were more numerous and definitely breeding. Guillemots were again the most numerous; the Auks and Puffins were greatly increased, and, according to reports, certainly breeding.

The island is well worth a visit and for anyone wishing to spend more than one day accommodation is available in the Bird Observatory at the old low lighthouse. Limited equipment is provided, beds, pillows, blankets, but no sheets or pillow cases, and cooking equipment. Visitors must take all their own food. Application should be made to the Bookings Secretary, Nature Conservancy, 12 Hope Terrace, Edinburgh, E.H.9 2A5. Not more than 6 observers may be resident on the island at one time.

Climbing party from H.M.S. Hecla on Rockall, March, 1969

Fulmar Petrel on nest. May Island, 1970 Photo by Captain E. F. Aikman, R.N.B.W.S.

Day visitors make their own arrangements. A boat is operated from Anstruther in the summer, commencing in June, and giving up to two hours on the island—cost 75 p. return. Enquiries to Mr. D. Smith, 117 Lady Nairn Avenue, Kirkaldy, Fife. There are no restrictions to landing but a call on the principal keeper of the lighthouse would not be out of place, time permitting.

[A full account of the birds and the story of the Observatory will be found in an exceptionally good book on the island by W. J. Eggeling, "The Isle of May" (Edinburgh, 1960). Ed.]

The Observatory and Field Station Report for 1968 in "Scottish Birds" magazine quoted the following breeding populations for 1967 as 11,000 pairs of Herring Gulls, 900 pairs of Lesser Black-backed Gulls, 3 nests of Great Black-backed Gulls, 30 pairs of Fulmars, with Shag, Guillemot, Razorbill and Puffin populations slightly increasing. In addition 58 pairs of Eider Duck nested. In 1968 Jasper Parsons ringed 4,884 Herring Gulls and 774 Shags.

During the periods of migration a great variety of small land birds make a landfall on the island. Probably the most fruitful periods for observation would be from April to mid May and again from mid August to mid October.

THE ROCKALL BANK IN SPRING

By Lieutenant Commander R. A. Wilson, R.N.

From 21st March until 17th May, 1969, H.M.S. HECLA was carrying out a survey of the Rockall Bank which provided a unique opportunity to study the bird life of a small but interesting patch of the North Atlantic over a prolonged period

For those to whom Rockall is only a name heard on shipping forecasts and gale warnings perhaps a brief description of the area would be in order.

The Rockall Bank lies approximately 200 miles west of the Outer Hebrides and extends 60 miles NNE and SSW. It is unconnected with the Continental Shelf but rises from a depth of about 1400 fathoms between 40 and 100 fathoms. Its most prominent feature is the granite islet of Rockall situated 18 miles from the northern end of the Bank which breaks the surface and rises to a height of 70 feet.

Rockall, because of its isolation, has for many years proved a magnet to ornithologists. However, due to the prevailing sea conditions, most have been disappointed in their efforts to approach it closely.

On 25th March with sea and weather conditions as favourable as one could hope for, a party of six from H.M.S. HECLA made a successful landing from a gemina dinghy. Despite the favourable conditions, it was by no means easy and it required perfect timing and very skilful handling of the gemini. In fact the first attempt to gain a foothold on Rockall very nearly finished before it began with the gemini suspended at a crazy angle on the sloping, weed covered ledge onto which it was intended to leap. Fortunately it did not turn over and was lifted clear by the next swell.

The rock was climbed by traversing the fissure at the bottom of the south western corner and up the sloping western shoulder. Al-

though not a particularly difficult climb, it is severely exposed in places and required considerable care since the rock is covered in a green slimy weed and is very slippery. Fortunately however the rock itself is extremely firm and nature has provided some very convenient hand and footholds.

Ornithologically the visit was disappointing. On arrival there were approximately 20 fulmars flying round the island and settling on it from time to time. Occasional Kittiwakes passed overhead, two Herring Gulls and three Gannets were also seen in the area, while the only other birds seen were four Manx Shearwaters swimming and diving close to the island and a single Puffin about two cables away from it.

The island itself was not nearly as whitewashed as was expected from the description in the Sailing Directions and there were no signs of any sea birds having nested there. Indeed it is so exposed and there is such a complete lack of suitable nesting sites that it is considered highly improbable that any sea birds nest there at all. An interesting find, however, was the remains of a fieldfare scattered amongst gull castings.

SEA BIRDS

The following sea birds were recorded:—

FULMAR *(Fulmaris glacialis)*

By far the commonest bird seen on the Rockall Bank. Numbers varied greatly but there were usually at least 20-30 Fulmars in the vicinity of the ship, often 50-60 and sometimes 100-200 or more. Although numbers were plotted and compared with water temperatures, depths, possible upwellings, currents etc., no discernible pattern was apparent. The occasional presence of fishing vessels within sight appeared to make little or no difference to the numbers actually following the ship.

MANX SHEARWATER *(Puffinus puffinus)*

Apart from two seen flying 10 miles south of Rockall Bank and four seen swimming and diving close to Rockall Bank itself, all on 25th March, no Manx Shearwaters were seen until 8th May. From then on they were seen daily in twos and threes.

GANNET *(Sula bassana)*

Single birds seen almost daily throughout the period, but occasionally 2-3 seen in company. In March and April only adult birds were recorded but in May nearly all those seen were in varying stages of immature plumage.

GREAT BLACK-BACKED GULL *(Larus marinus)*

Occasional single birds of this species seen throughout the period, usually in company with Lesser Black-backs. Almost all immature, very occasional adult.

LESSER BLACK-BACKED GULL *(Larus fuscus)*

Seen throughout the period. In March only occasional single birds were seen. In April single birds were seen almost daily with occasional small parties of 3-4 although on one day (12th April), a maximum of 7 was recorded. In May the ship had an almost continuous escort of up to 17. Almost all those seen were either adult or in the final stages of changing into adult plumage.

Their usual behaviour was to glide about 50 feet above the ship, wing-tip to wing-tip, peeling off from time to time to feed on scraps thrown overboard. They appeared to appreciate the potential food value of passage migrants and I saw one unsuccessfully chase a Fieldfare in a most determined manner. On another occasion I saw one pursue a Merlin for a hundred yards or so.

HERRING GULL *(Larus argentatus)*

Seen throughout the period but in very small numbers. Those seen were all adult; usually single birds, but occasionally in pairs, in company with Lesser Black-backs.

BLACK HEADED GULL *(Larus ridibundus)*

A bird in adult plumage was seen on only two occasions on two successive days (9th and 10th May) so this may have been the same bird. It did not follow the ship for long on either occasion.

KITTIWAKE *(Rissa tridactyla)*

After the Fulmar the commonest bird of the Rockall Bank. During March and April it was usual to have at least 10-20 following the ship continuously with numbers rising to 50-60 and on one occasion to 400-500. This large flock gathered at 0545 on 17th April together with 300-400 Fulmars and 6 Great Skuas. They were clearly feeding but on what I could not see. The majority (70%) of Kittiwakes seen during March and April were in adult plumage. In May their behaviour appeared to change in that they seemed to be wandering the ocean in smallish flocks (10-20). For hours there would be no sign of Kittiwakes and then suddenly they would appear and just as suddenly be gone again. There was however no movement in any particular direction. The percentage of juveniles in these flocks was higher—about 50%.

AUKS *(Alcidae)*

Members of the Auk family were present in small numbers throughout the period. Usually recorded in scattered pairs but sometimes as single birds and more rarely as small rafts of 5-6. Unfortunately due to sea conditions and distance from them it was usually impossible to be certain of the species. The only ones positively identified were Puffins whose identification was occasionally possible when the light caught their orange bills and legs.

GREAT SKUA *(Stercorarius skua)*

Present throughout the period. Usually single birds but sometimes two or three and on one occasion 6 seen together (17th April). Few were seen during March but in April there was usually at least one to be seen at any one time following the ship at a discreet distance. In May their numbers appeared to dwindle and only occasional birds were recorded until 16th May when the strong NE wind died down and a definite north easterly migration was noted (at least 5 within the hour) together with other species of Skua. Never seen to molest either Fulmars or Kittiwakes and content to feed on scraps thrown overboard.

ARCTIC SKUA *(Stercorarius parasiticus)*

First seen on 28th April. During the late afternoon I was watching a flock 10-15 Kittiwakes on the water when they suddenly towered into the sky. They were then set upon by a pair of dark phase Arctic Skuas. For about ten minutes I was treated to a marvellous display of aerobatics as the Skuas followed every twist and

turn made by the Kittiwakes in their efforts to evade their attackers. During the north easterly passage of Skuas on 16th May at least one Arctic Skua was identified and 6 unidentified Skuas could well have been of this species.

LONG TAILED SKUA *(Stercorarius longicaudus)*

Two positively identified during the north easterly movement of Skuas on 16th May.

POMARINE SKUA *(Stercorarius pomarinus)*

Seen for the first time on 28th April when 3 were seen flying in a north easterly direction. The wind was from the NE but very light. Pomarines (both dark and light) were then seen almost daily for the rest of the period. However it was noticeable that only occasional ones were seen during periods of strong north-easterly winds but on 16th May when the wind dropped, 9 were identified within an hour. On passage they appear to spread themselves well over a very broad expanse of ocean travelling singly or in pairs and often settling on the sea.

LAND BIRDS

The land birds seen on the Rockall Bank in spring are for the most part, the drop-outs from the mass migrants heading for Iceland.

Those seen from HECLA usually appeared in an exhausted state carried by a north-easterly wind. Presumably these birds had set off from Ireland or the Western Isles in a south-westerly wind associated with a low pressure area centred off the west coast. As they flew northwards the wind backed until they were eventually flying into a north-easterly airstream being relentlessly drifted out into the Atlantic.

The difficulty with land birds at sea is in determining the direction from which they arrive and in which they depart. All too often they are first sighted when they are already onboard or flying round the ship. Often, too, they seemingly leave in a definite direction only to return onboard 5 or 10 minutes later.

Birds seen were:—

GREY LAG GOOSE *(Anser anser)*

Two Grey Lags circled the ship at close range at about 1000 on 24th April. They eventually settled on the sea close astern in the ship's wake. On the following day a single goose circled the ship. These were possibly stragglers from a flock which I think passed us late the previous evening. I did not see the flock myself but from the description I think they were almost certainly geese.

BRENT GOOSE *(Branta bernicla)*

A single bird flew close past the ship in a westerly direction on 17th May.

MERLIN *(Falco columbarius)*

Two arrived. The first, a female, arrived during the evening of 18th May. She was obviously very tired and seemed remarkably tame. She left after about 2 hours when the ship altered course into the wind and her perch became underswept and uncomfortable.

The second, a male, still in juvenile plumage, appeared at noon on 20th May. Altogether he was a very much fitter specimen and I watched him flying alongside us for about an hour before he decided to land onboard. The ship was steaming into the wind at the time

giving a relative wind speed of about 35 knots. He had to work hard to keep up with us, flying very low over the waves, often vanishing into the troughs. Occasionally he would climb to about 50 feet, rouse his feathers and scratch himself and then descend to the wave tops again. When he eventually landed onboard he stayed for about 2 hours before leaving to continue his journey. Both Merlins appeared during strong north-easterly winds.

OYSTERCATCHER *(Haematopus ostralegus)*

One appeared on 7th May, circling the ship and landing on the flight deck and forecastle. It seemed exhausted and eventually missed its footing while attempting to settle on a guardrail and flopped into the sea. Wind from the north-east.

RINGED PLOVER *(Charadrius hiaticula)*

A single bird flew close past the ship on 16th May. It climbed away out of sight heading due south.

LAPWING *(Vanellus vanellus)*

A single bird circled the ship briefly on 10th May.

WHIMBREL *(Numenius phaeopus)*

Single birds, thought to have been of this species seen on 6th and 13th May.

DUNLIN *(Calidris alpina)*

A single bird circled the ship on 14th May.

SWALLOW *(Hirundo rustica)*

A single bird flew onboard on 14th May. It was given a feed of glucose solution in the hope that it might revive it before it was released.

FIELDFARE *(Turdus pilaris)*

Two single birds arrived onboard on 25th April and another single bird on 9th May. All appeared exhausted but presumably attempted to continue their journey as none were found dead onboard. An L.B.B. Gull was seen to pursue one in a very purposeful manner. Wind north or north-east. The remains of another bird were also found on Rockall on 25th March.

WHEATEAR *(Oenanthe oenanthe)*

Seen on 9th, 15th and 16th May. All females, very exhausted and weak. One was caught but died within hours without touching food.

MEADOW PIPIT *(Anthus pratensis)*

On 21st March 5 or 6 flew round the ship but flew on without alighting. Wind southerly, 10 knots. No more seen until 17th April when 4 were seen flying round the ship. They too flew on without alighting. Wind southerly, 10 knots. A single bird was seen onboard on 15th May during a period of strong north-easterly winds and was eventually picked up dead.

WHITE/PIED WAGTAIL *(Motacilla alba)*

Two single birds arrived onboard on 11th and 13th May during a period of strong east-north-easterly winds. Both appeared fit and strong and presumably continued their journey.

SNOW BUNTING *(Plectrophenax nivalis)*

One female was seen on forecastle on the evening of 5th May, while during darkness on 8th May a dazzling white passerine seen flying round the mast reflected in ship's lights was thought to be of this species.

SEA BIRD OBSERVATIONS SOUTHWARDS FROM THE SOUTH SHETLAND ARCHIPELAGO

By Captain P. W. Buchanan, R.N., H.M.S. Endurance

The following observations were made from H.M.S. Endurance south of latitude 60°S between 4th December, 1968 and 20th February, 1969.

PENGUINS

Emperor Penguin *(Aptenodytes forsteri)*. A group of six and a pair were seen on the edge of the fast ice in Crystal Sound on 11th and 12th January respectively. The latter pair appeared to be courting.

Adelie Penguin *(Pygoscelis adeliae)*. Frequently seen on icefloes south of Deception Island down to Stonington. Numbers varied from one to hundreds. In late December at latitude 66½°S, forty miles west of Adelaide I several flocks seen travelling purposefully in a south-easterly direction across pack ice. In mid and late February breeding colonies were found on Fish Island in Crystal Sound and at the southern end of Adelaide I.

Gentoo Penguin *(Pygoscelis papua)*. Breeding colony found on a rock adjacent to Hugo I in early January. Each pair appeared to have two chicks. Unfortunately there was no time to carry out a count.

Chinstrap Penguin *(Pygoscelis antarctica)*. These had colonies on rocks adjacent to Hugo I, but separate from Gentoo Penguins. When seen in early January they were paired but did not have eggs or chicks. A very large number were seen about Deception Island; there was however no opportunity to visit their breeding colonies.

ALBATROSSES

Wandering Albatross *(Diomedea exulans)*. Occasional birds were seen at sea in the vicinity of the South Shetland Archipelago.

Black-browed Albatross *(Diomedea melanophris)*. One or two seen at sea in the vicinity of the South Shetland Archipelago. On 28th January, a flock of about 30 were seen in open water near the Argentine Islands, and a single bird off the southern end of Laroisui I on 19th February.

PETRELS

Giant Petrel *(Macronectes giganteus)*. Seen frequently around the South Shetland Archipelago, decreasing in numbers as the ship moved south. In mid December they were seen occasionally over pack ice as far south as 66½°S, about forty miles west of Adelaide I. During late February they were seen as far south as Stonington. In late December thirty nests were found with eggs at Potter Cove.

Pintado Petrel *(Daption capensis)*. Very common amongst the South Shetland Archipelago, diminishing in numbers to the south and finally disappearing when the ship entered the pack ice. One seen over pack ice at 65°S and last seen on 18th January near Hugo I.

Southern Fulmar *(Fulmarus glacialoides)*. Frequently seen as far as 66½°S and over pack ice forty miles west of Adelaide I. Last seen on 18th January near Hugo I.

Prions *(pachyptila sp)*. Seen in flocks of about 12 birds as far south as Argentine Is.

Antarctic Petrel *(Thalassoica antarctica)*. Seen singly or in small flocks of up to ten birds south of Deception I to 66½°S. None seen after 28th December.

Snow Petrel *(Pagodroma nivea)*. Seen singly or in pairs over open water and pack ice from the Palmer Archipelago to 66½°S.

STORM-PETRELS

Wilson's Storm-Petrel *(Oceanites oceanicus)*. Very common from South Shetland Archipelago as far south as Stonington; only one or two seen over the pack ice, however.

GULLS

Southern Black-backed Gull *(Larus dominicanus)*. Very common in all coastal areas of Potter Cove, Deception I, Argentine Is, Crystal Sound, Adelaide I and Stonington.

TERNS

Arctic Tern *(Sterna paradisea)*. Frequently seen at Potter Cove, Deception I, Argentine Is and Adelaide I. Two over pack ice at 66½°S in mid December.

SKUAS

Great Skua *(Catharacta Skua)*. Seen in the same places as the last species in fair numbers, and over pack ice in mid December.

CORMORANTS

Blue-eyed Cormorants *(Phalacrocorax atriceps)*. Found breeding among Adelie Penguins on Fish Island in Crystal Sound with young nearly fully fledged in mid and late February.

SHEATH-BILLS

Sheath-bills *(Chionis alba)*. Seen infrequently at Deception I and two seen near Anvers I in late January.

OBSERVATIONS FROM AN OCEAN ISLAND

By Roger Pocklington, Associate Member RNBWS

In the course of my work as an oceanographer I have had occasion to watch birds over every ocean, excepting only the South Pacific. Now that I am temporarily land-bound I must confine my attention to those birds which come to me, rather than going to them. My observation platform has, however, many of the characteristics of a "stationary ship," as I hope to show in this note, so my opportunities are not as curtailed as they would be if I were inland. This then is my situation on Bermuda.

Bermuda, or better, the Bermudas, because there are 5 main islands and over a hundred little ones perched atop of a volcanic pedestal which rises 16,000 ft. from the surrounding sea-floor, is like a ship riding at permanent anchor station in mid-ocean. Hence our ability at the Bermuda Biological Station to carry out deepsea research programs with small vessels on day trips as deep water is reached within an hour, the 1,000 fathom line being only 6 miles off the south shore. Investigations of the chemistry and physics of seawater and of biological productivity and marine plankton distributions are made in addition to studies of the geology of the Bermuda platform.

The islands lie only 750 miles due south of my last place of residence—Halifax, Nova Scotia—but those 750 miles sure make

for a difference in climate. Winter air temperature is not usually below 60°F for any extended length of time and in summer the temperature seldom rises above 90°F. Although the islands are situated north of the Tropics, the marine fauna of Bermuda is similar to that of the West Indies, though with fewer species, and among the chief attractions to visitors from the North are the coral reefs, among the most northerly in the world, and the mangrove swamps with their rich faunal associations. I should also explain for those who have not visited Bermuda, that in spite of being bounded by coral reefs, Bermuda is not a low-lying atoll but has elevations to 250 ft., the principal land-forms being fossilized sand-dunes. There is no fresh surface water but there are saline marshes. The islands were once covered in indigenous trees, principally the Bermuda cedar, now all but gone due to attack by a scale insect, also Bermuda palmetto olivewood, buttonwood, hackberry and bay grape, but they are now clothed in imported exotics such as casuarina, tamarisk, oleander, hibiscus, Chinese fan palm, and screw palm.

All this tropical vegetation makes one think of colourful tropical birds like parrots and parakeets, hummingbirds, trogons, todies and honeycreepers, but except for the dull little Ground Dove *Columbigallina passerina bahamensis*, introduced from the Bahamas by the early settlers, and the Kiskadee *Pitangus sulphuratus*, a large yellow and brown tyrant flycatcher introduced from Trinidad in 1956, the only truly tropical bird breeding in Bermuda is the White-tailed Tropic-bird *Phaethon lepturus catesbyi*. The absence of tropical land birds, both as residents and vagrants, is one of the first things a bird-watcher in Bermuda will notice.

Considering now the seabirds; first, the gulls and terns. There are plenty of these around Bermuda in the winter, including the Great Black-backed Gull *Larus marinus*, Herring Gull *Larus argentatus*, Ring-billed Gull *Larus delawarensis*, Bonaparte's Gull *Larus philadelphia*, Forster's Tern *Sterna forsteri* and Common Tern *Sterna hirundo*, but, except for the Common Tern, they are not present at other times of the year. Only the Common Tern now breeds in Bermuda, although the Roseate Tern *Sterna dougalli*, and the Little Tern *Sterna albifrons*, used to breed in the islands but disappeared due to persecution and have never re-established themselves. Among the less common visitors are the Lesser Black-backed Gull *Larus fuscus*, and the Black-headed Gull *Larus ridibundus*, from Europe. One of the latter, recorded in 1964, carried a Russian leg band.

Why the gulls and terns which are such an obvious feature of the bird-life in winter fail to remain throughout the year is a mystery which I hope my work here may do something to dispel. The primary production of organic matter (as measured by the uptake of radioactive carbon) at a location 15 miles SE of Bermuda (Station "S", 32°10′N, 64°30′W) has been measured over a number of years. It was found that though the levels of maximum and minimum production in these semi-tropical waters are less extreme than in temperate seas, the annual rate is as high as or higher than that of temperate and northern waters. It does not vary greatly from one year to the next, and, though it shows variation over the year, the highest values are in early April which is after the winter resident sea-birds have left. Measurements made at several locations on the

Bermuda platform showed levels somewhat higher than those at the deep-ocean station with highest levels in the late summer and fall. As all higher stages of the marine food-chain are ultimately dependent on primary production there is from this source no evidence that more food is available for avian predators and scavengers in the winter.

Bearing in mind that accounts of Bermuda at the time it was first colonized by man describes large breeding populations of seabirds, it might be thought that it is lack of suitable nest-sites which keeps seabirds from our shores in summer. There are, however, more immatures than adults among the wintering gulls and first-winter birds of the larger species would breed in the coming year. These might well be expected to remain as the "sea-shore scavenging" niche is unoccupied in summer except for the occasional Common Crow and enterprising Kiskadee.

Of the seabirds that breed in Bermuda, the White-tailed Tropic-bird, locally called the Longtail, is by far the most successful. It is a hole-nester, and as the cliffs of Bermuda are honey-combed with holes there is no lack of breeding sites. Last summer I kept an eye on three nests for one of our Visiting Investigators who is studying the navigating abilities of Tropic-birds. I was rewarded by what I later learned was a most unusual sight. I saw a young Longtail, easily identified by the black barring on the upperparts, out in the open on the rocks. I thought at first it was injured and could not fly so I approached and touched it. In response it hissed at me and spread its wings which I then saw were in good order. I retreated and watched from a distance. The young bird then waddled to the edge of the cliff, dived off and flew straight, as far as my eyes could follow it, out to sea. The remarkable feature of this observation is that, according to David Wingate the Government Conservation Officer and acknowledged authority on Bermudian birds, the young Longtail, reared in confinement with limited opportunities for exercising its wings, nevertheless leaves the darkness of the nest-hole for the light of day and on reaching the cliff-edge precipitates itself off and immediately flies strongly out to sea, not to return until the next summer. I was, therefore, very lucky to be present at such a rare event as a Longtail's first flight.

I sailed from Bermuda to Halifax aboard the C.S.S. "Hudson" at the end of August when adult Longtails were still plentiful over the Island. When I returned in late September they were gone from the cliffs but were still about the island. By mid-October they had all left Bermuda waters. Adults were frequently spotted at sea as we cruised north, right up to the edge of the Gulf Stream. No immature birds were seen: perhaps they immediately head south to winter-quarters in the West Indies?

The other breeding seabirds of Bermuda, in contrast to the success of the tropic-bird, present a much sadder story. Audubon's Shearwater *Puffinus l'herminieri*, is reduced to a few pairs breeding on outlying islets. The Cahow *Pterodroma cahow*, the most famous of Bermuda's breeding birds that once bred in thousands on the main islands, was thought to be extinct for centuries, and was rediscovered only twenty years ago, is also confined to small offshore islets. Under protection it had been hoped that the remaining population, freed from competition with tropic-birds for nesting

holes and from destruction by man and rats by the devoted efforts of a small group of local enthusiasts, would increase and spread to an adjacent larger island—Nonsuch Island—which offers more suitable terrain for burrowing. However, DDT has now spelled the doom of this species and reproduction declines steadily.

Winter breeding would seem to reflect a southern origin of the Cahow whose nearest relative is the Black-capped Petrel, *Pterodroma hasitata*, which breeds in Haiti and on Dominica. Where the birds go in the 4½ month period from June to late October that they are absent from the Island is at present unknown but it is more than likely that they dispersed north or north-west toward the axis of the Gulf Stream, remaining on the warm side of the current. Black-capped Petrels have been recorded west of Bermuda 100 miles off the Carolina coast, though they may have been caught up in front of a hurricane. Perhaps the answer is already in or will appear in the sea reports of the R.N.B.W.S.

My oceanographic cruise to Halifax was by courtesy of the Bedford Institute, Dartmouth, Nova Scotia. I am indebted to David Wingate for much help in finding birds in Bermuda and in stimulating conversation.

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(It is not entirely clear that the level of DDT residues so far recorded in Bermuda Petrels, about half that found in some North American human beings, is necessarily enough to cause a decline in reproduction, and it is difficult to be sure that this can be measured accurately in such a small population as remains with this species in Bermuda. However, there are an increasing number of reports of a rising level of not only DDT but a growing variety of other chemical residues orginating from pollution in oceanic seabirds, and it would be useful to have more specimens for analysis. Dead birds which are brought back to the British Museum (Natural History) can also be used for this purpose. W.R.P.B.)

EXTRACTS FROM METEOROLOGICAL LOGS 1968-1970

[Among an increasing number of reports of individual species at sea some more unusual occurrences are recorded below. Ed.]

SEABIRDS

ALBATROSSES ONBOARD

It is rare indeed for Albatrosses to come aboard ships and then usually only when they have collided by mischance with some part of a ships structure. The meteorological log books from two ships in which this occurred in 1968 indicate the impression which such an occurrence creates

20th August, 1968. M.V. *Taiyuan*, Captain D. A. Hutchinson, China Navigation Co. Ltd., P.O. Box 1, Hong Kong. At 32°S, 152°50°E off Crowdy Head, New South Wales. "A loud thump was heard and on investigation a magnificent Wandering Albatross was found lying on deck, its neck broken upon impact with the main aerial. It had a wing span of 12 ft. 5 ins. The superb bird was regretfully consigned to the deep."

21st November, 1968. M.V. *Pembrokeshire*, Captain R. B. Tiplady, Ocean Fleets Ltd., India Building, Water Street, Liverpool. Hamburg to Port Swettenham. "To his astonishment Mr. A. Palmer, Chief Officer, on walking round the decks in the early morning found an adult Wandering Albatross sitting on the forecastle head. The ship was at 26°49'S, 45°39'E. In surprise and eagerness to launch it he forgot to take its vital statistics. However it was launched overboard not a moment too soon for the Chinese cook arrived on the scene 10 seconds later intent on chicken chow mein!"

ALBATROSSES FOLLOWING A SHIP FOR 1750 MILES

18th-23rd October, 1968. M.V. *Clan Ramsay*, Captain D. L'Estrange, Clan Line Steamers, 2-4 St. Mary Axe, London, E.C.3. Capetown to U.K. "On 19th October after sailing from Capetown two Albatrosses, one much darker than the other, remained following the ship for 1750 miles to 9°04'S, 2°45'W before leaving, the ship having steamed at 17 knots throughout." [Note by Editor: Unfortunately the species were not specified. This is the furthest north report yet received other than 2nd Officer Brackenridge's identification of a Yellow-nosed Albatross reported elsewhere in this issue.]

BULL SEAL AND CAPE GANNETS

18th September, 1968. M.V. *Gloucestershire*, Captain L. H. Sheldrake, Bibby Bros. and Co., Martin's Bank Building, Water Street, Liverpool 2. Walvis Bay to Colombo. At 20°45'S, 12°42'E, a large bull seal was seen to be fighting with two Cape Gannets, one of which was floating on the sea near the seal while the other was flying about the seal's head frequently attacking it. The seal then started diving, coming up and attempting to land on top of the first Gannet, finally succeeding in doing so, and apparently dragging it under water.

A BOOBY MAKES A FORCED LANDING

17th November, 1968. M.V. *Shropshire*, Captain E. H. Jones, Bibby Bros. and Co., Martin's Bank Building, Water Street, Liverpool 2. Chimbote to Balboa. A Booby flew into the ship and collapsed on the bridge by the sidelight box with its head and bill in the side-

light electric lead connection hole. First attempt to release the squawking hissing bird being unsuccessful it was left for some time when it attempted to escape through the hole in the sidelight. However it was finally released unhurt and flew off.

A WHITE-FACED STORM-PETREL (Pelagodroma marina) TURNS UP UNEXPECTEDLY

10th July, 1969. M.V. *Westmorland,* Capt. J. A. North, New Zealand Shipping Co. Ltd., P and O Building, Leadenhall Street, London, E.C.3. Panama to Brisbane. At 25°52′S, 157°20′E, a White-faced Storm-Petrel was discovered below decks in the storeroom. Attempts to get the bird to take off failed and it preferred to burrow head first down the side of the Chief Steward's bunk. Eventually on arrival at Brisbane a day later it was placed in the water and skimmed away strongly low over the surface to the river's bank.

WHITE-FACED STORM-PETREL. SOUTH PACIFIC OCEAN

On 5th January, 1970, at 46°S, 138°48′W, when M.V. *Haparangi,* Captain J. Burn, New Zealand Shipping Company, was on passage from New Zealand to Las Palmas via Cape Horn. A White-faced Storm-Petrel was recovered in an exhausted state onboard. It was placed in a well ventilated cardboard box, and the following day had recovered sufficiently to take a small amount of water. Later it spent some time exercising its wings on the chart room table. On 7th January small quantities of raw fish and water were forced on the bird, and by the morning of 8th January it was flying all around the wheelhouse. It was released in position 45°50′S, 110°W, and flew away strongly.

PRIONS IN THE SOUTH INDIAN OCEAN

On 16th June, 1970, Captain M. R. Ryan, S.S. *Jervis Bay,* Container Fleets Ltd., Navigation House, 1 Aldgate, London, E.C.3., was on passage from Las Palmas to Fremantle. At 37°25′S, 57°10′E, a huge flock of Prions approximately one mile in length was seen heading due south at sea level. The birds appeared to be six to nine inches long, white underneath and grey above with black markings. [These were probably Salvin's Prions *(Pachyptila salvini)* which breed on Marion and Crozet Is. Ed.]

POSSIBLE SOOTY SHEARWATERS IN NORTH PACIFIC

Captain G. Pirie, M.V. *Sugar Crystal* reports that on 6th July, 1969, at 42°44′N, 142°28′W, the ship passed through several flocks of hundreds of birds at rest on the surface of the sea. He reports them as dark brown with a brown bill, sturdy bodies about one foot six inches in length and sitting low in the water. To move out of the ship's track they partly unfurled their wings and scuttled across the water. [It would appear that these were probably Sooty Shearwaters *(Puffinus griseus)* at the end of their northward migration up the Humbolt Current from which large numbers appear in the eastern quarter of the North Pacific at this season. Ed.]

LANDBIRDS

ASSISTED PASSAGE FOR A TURNSTONE

The following report has been received from M.V. *La Colina,* Buries Markes Ltd., City-Gate House, Finsbury Square, London,

E.C.2. On 21st August, 1969, some thirty miles northwest of Cape Finisterre a Turnstone *(Arenaria interpres)* came aboard on the after deck, visiting the galley and feeding on a diet of porridge and any scraps thrown out. Thus it remained about the ship until 30th August, finally departing in the vicinity of Fernando Noronha Islands, 250 miles northeast of Recife, Brazil.

GREAT BLUE HERONS

Two reports have been received, each including excellent descriptions and sketches, the first from M.V. *Sugar Crystal*, Captain S. Gould, Sugar Line, 28 North Woolwich Road, London, E.16. 27th October, 1968, at 30°38′N, 55°30′W, about 500 miles east-south-east of Bermuda, a Great Blue Heron *(Ardea heriodas)* overtook the ship, flying at between 25 to 30 knots, and settled on the davit head, remaining for several hours. [This is a great distance out in the Atlantic from the direction of its normal wintering areas in the Southern States of U.S.A., or the West Indies. Ed.]

The second bird came onboard S.S. *Sunek*, Captain H. Syversen, Saguenay Shipping Company Ltd., 1060 University Street, Montreal 101, PQ, Canada, on 7th March, 1969, at 13°40′N, 78°31′W in the Caribbean.

HERON AND CATTLE EGRETS

On 24th November, 1968, M.V. *Ribblehead*, Captain J. Parsloe, Bolton Steamship Company Ltd., Ibex House, Minories, London, E.C.3, was on passage Brazil to Cardiff. A Grey Heron *(Ardea cinerea)* crashed on deck, the ship being 180 miles southwest of Cape Verde Islands. It remained until late on 26th November, and on one occasion was seen to leave the ship, catch a fish in the sea, return onboard and spit it out. [This seems most unusual. Ed.] On the afternoon of 25th November two Cattle Egrets *(Ardeola ibis)* arrived and alighted alongside the heron but soon flew off to the northeast.

EASTERN WILLET FAR OUT IN NORTH ATLANTIC

Captain C. H. Baker, S.S. *Volvatella*, Shell Tankers Ltd., Shell Centre, London, S.W.1., reports that on 13th July, 1969, at 29°N, 56°W, about 480 miles east-southeast of Bermuda an Eastern Willet *(Catoptrophorus c. semipalmatus)* came aboard, remaining until 17th July, the ship then being at 41°N, 37°W. The prevailing wind being southwesterly it could hardly have got back to its probable wintering area in the West Indies.

PEREGRINE FALCONS AT SEA

On 23rd June, 1969, M.V. *Rievaulx*, Captain G. Murray, Bolton S.S. Company Ltd., Ibex House, Minories, London, E.C.3, was on passage from the British Isles to Brazil. A Falcon, from the description evidently a Peregrine Falcon *(Falco peregrinus)* settled on the mainmast navigation light table, remaining with the ship for two days, killing approximately ten storm-petrels a day, the little birds taking no avoiding action. The Falcon left when the ship was approaching St. Paul's Rocks.

On 4th November, 1969, M.V. *Sugar Crystal*, Captain J. E. Leaver, was on passage from Panama towards Japan. A female Peregrine Falcon came aboard during 4th November at 12°15′N, 117°30′W, 800 miles from Cape Corrientes, Mexico, remaining until 9th November in 117°10′N, 149°W, some 360 miles east of

Hawaii. At night it roosted on the top of a samson post. It killed and fed during the day about every 90 minutes, averaging about 8 birds per day, and consuming about 40 birds during the 5 days. When about to hunt it would move to a clear advantage point and survey the ocean, its vision being so excellent that we had never realised that so many birds were in the vicinity of the ship. Its prey were Petrels and Shearwaters, the remnants of some being preserved for indentification. The prey was chased a few feet above the waves, and after a period of dodging and wheeling, so complicated and fast that it was difficult to follow with binoculars, the Peregrine would accelerate, swoop, seize the bird in its talons and return to the ship. Occasionally if the bird was large and still struggling the Peregrine would kill with the beak in flight. The chases were very exciting and rarely without a fatal end to the victim. The birds were not eaten immediately, but appeared to be played with for some minutes before plucking. Each part was eaten except for the bill, wings and legs. At the time it left a ship had just been sighted steaming in the opposite direction and it was thought that possibly the bird joined this ship for the return voyage.

SPRING MIGRANTS IN WESTERN NORTH ATLANTIC

On 14th April, 1970, M.V. *Crystal Crown*, Captain G. H. Griffiths, Sugar Line Ltd., 28 North Woolwich Road, London, E.16, was on passage from Salt River towards London. At 26°56′N, 67°12′W, two small landbirds flew onboard 325 miles from Bermuda. One was captured, clearly very exhausted, and placed in a well ventilated box after taking a little water. Some hours later it seemed quite fresh, but unfortunately died later. [From the detailed description this seems to have been one of the wood warblers which summer in eastern U.S.A., wintering in the West Indies and Central America. It was suspected to be the Worm-eating Warbler *(Helmitherus vermivorus)* but the details of such very similar warblers were insufficient for definite identification. Ed.]

AN UNUSUAL LAND BIRD ONBOARD IN MID SOUTH PACIFIC OCEAN

25th April, 1970. M.V. *Rakaia*, Captain P. Lay, New Zealand Shipping Coy Ltd., P. and O. Building, Leadenhall Street, London, E.C.3., on passage from New Zealand to Balboa. An unknown long legged wader was observed perched on a samson post. Had it not been for the detailed observation and carefully painted sketches made by 4th Officer Hicks the bird would have passed unrecorded. This rather large slender long legged wader with its long slender, pointed bill, grey upperparts, pale underparts, already in the sketch showing a chestnut flush on its breast, and black tail, has been identified as a Hudsonian Godwit *(Limosa haemastica)*, better known as the American Black-tailed Godwit. [Note: These birds breed in Arctic North America and undertake an immense trans-global migration to winter in South America, a few also reaching New Zealand. By April the urge to return has already begun and by this date birds have begun to assume breeding plumage, their upperparts finally darkening and underparts assuming a rich chestnut colour. Ed.]

SHORT NOTES

OILED GULLS IN THE CENTRAL NORTH ATLANTIC

By Second Officer S. E. Chapman, s.s. *"Pizarro"*

During a passage from the Azores to Nassau between 30th December, 1969 in position 38°N, 42°30′W, and 3rd January, 1970 in position 29°N, 67°W, I was struck by the number of gulls that were sighted in mid ocean. Continuous gales of west and northwest winds were experienced, and as I have previously noted gulls far at sea after persistent strong adverse winds this was no doubt the reason. What I did find disturbing was the high proportion of individuals that were oiled, mainly on the breast, belly and under-tail coverts. Over the four days I noted twenty four Herring Gulls, ten of which were oiled, two Great Black-backed Gulls, neither oiled, and four Kittiwakes, one oiled. Although the oiled gulls seemed to experience little difficulty in maintaining station astern of the ship one wonders how long they could survive in the open ocean in their impaired state and indeed if they were even able to recover from such a state. The presence of unoiled birds in similar numbers suggests however that the oiled individuals were not wind drifted because of their oiled state, and one had no idea how long they had been suffering from oil contamination. During the first two days the mean force and direction of the wind was force 7 to 9 from the northwest, and during the last two days began to lessen to force 4 to 5 from west to north. [This is an area of the ocean normally particularly devoid of sea birds, well to the south of the normal range of Kittiwakes and in which gulls have never before been reported during sea passages over the past twelve years by R.N.B.W.S. members on passage. Ed.]

OBSERVATIONS DURING OIL FUEL CLEARING OPERATIONS FOLLOWING THE SINKING OF R.F.A. ENNERDALE OFF MAMELLE ISLAND IN THE SEYCHELLE GROUP

By Radio Officer W. F. Curtis, R.F.A. *Brambleleaf*

R.F.A. *Ennerdale* sank after striking an uncharted water obstacle near Mamelle Island in early June, 1970. At the time she was carrying 40,000 tons of fuel oil and lesser quantities of avcat and diesel. The latter two both evaporate on exposure to air, but the fuel oil does not.

R.F.A. *Brambleleaf* carried some 20,000 gallons of dispersant and the following observations cover a period up to 4th July.

Owing to the desire of inhabitants of the Seychelle Islands that one consignment of Gamlin thought to have toxic properties which might cause destruction to marine life this has not been used. To speed the process of clearing the emergent oil explosives have been used and the slick sprayed with dispersant from small boats. Up to the 4th July about half of the oil had been released and generally dispersed.

On approaching Maké Island on July 3rd numerous sea birds were seen including the following: Wedge-tailed Shearwaters, 600+, Little Shearwaters, 250+, Sooty Terns, 1,000+, Bridled Terns, 50, White Terns, 35, Common and Lesser Noddies, 500+,

Black-naped Terns, 100+. All the birds were feeding in flocks in an area free of pollution and were unharmed. On 4th July, *Bramble-leaf* took a northerly course fairly close to Mamelle Island and through the main area of oil slicks, a slick of some 10 to 12 square miles stretching towards Silhouette Island was crossed, consisting of a thin film of oil, but also small areas of thick oil. None of the birds seen, mainly Sooty Terns, showed any trace of oiling. Further north well clear of the oil near Dennis Island large flocks of the same species were also unharmed.

On the afternoon of 3rd July I had visited Mr. P. Loustau-Lalanne who stated that he had received no reports of oiled birds up to that date.

YELLOW-NOSED ALBATROSS *(Diomedea chlororhynchus)* OFF TOBAGO, WEST INDIES

Observer: 2nd Officer W. Brackenridge, Clock View, Innellau, Argyll, Scotland.

Date: 19th September, 1968. Position: 11°50′N, 60°55′W. Observer's report: The bird was first sighted by the 3rd Officer who telephoned to me to say that it appeared to be an Albatross. On reaching the bridge with binoculars I found the bird about 250 yards from the ship.

Description as observed: The head was white, very slightly flushed with grey. The rump and underparts white. The underwing was white with a rather broad dark margin on the leading edge. The upperwing was very dark, possibly black. The back was a decided black-brown. The tail appeared to have brown or grey-brown markings. The bill was very dark with the upper margin yellow. The wing span about 6-7 feet.

I am familiar with many albatrosses, and with this species in the South Atlantic and Indian Oceans around the Cape of Good Hope. Although the 3rd Officer is not a bird watcher he has also had some voyages around the Cape of Good Hope and in Australian waters, so he is I am sure also familiar with Albatrosses. I am also familiar with all the gannets and boobies. Apart from colouration the difference in shape and size between the Yellow-nosed Albatross and any of the gannets or boobies is obvious. I have no doubt at all that this was a Yellow-nosed Albatross. [Nor have I. Mr. Brackenridge is an experienced observer. Ed.]

REPORTS OF RINGED ALBATROSS, GANNET AND HERRING GULL

1968. From M.V. *Sugar Crystal*, Captain S. Gorell, Sugar Line Ltd., 28 North Woolwich Road, London, E.16. On passage from Balboa towards Japan. 3rd August, at 25°04′N, 114°09′W. A Black-footed Albatross *(Diomedea nigripes)* was observed close astern eating scraps of food. It carried a silver ring on its right leg.

1969. From Chief Engineer J. O. Brinkley, Cranbourne, Elkins Green, Blackmore, Ingatestone, Essex, England. 19th May, at 47°15′N, 15°W, 350 miles southwest of Ireland. A Herring Gull *(Larus argentatus)* was observed with a loose red ring on the left leg, and a monel ring on the right leg. It was subsequently confirmed

by Mr. Jasper Parsons that this was one of 4,500 young Herring Gulls ringed by him on the Isle of May (Firth of Forth), in 1966, and was now 3 years old.

1969. From Captain M. Simpson, M.N., 98 Dorset Road, Bexhill-on-Sea. 21st December, a heavily oiled Gannet *(Sula bassana)* was found dead on the beach at Bexhill, 50°50′N, 0°29′E, and carried a ring numbered 1010448. It was subsequently confirmed that it was ringed by Mr. A. T. MacMillan on the Bass Rock, East Lothian, on 16th July, 1960, as a chick. It was therefore recovered 380 miles south-southeast as the "crow flies."

FAVOURED WINTERING AREA OF WHITEFACED SHEARWATERS OF NEW GUINEA

Chief Officer D. M. Simpson who has been recording sea birds during many passages covering Indonesian and Western Pacific Islands reports that past observations indicate that large numbers of Whitefaced Shearwaters *(Puffinus leucomelas)* winter in areas off the north coasts of New Guinea and New Britain, dispersing southwards from the Japanese area by way of the China Sea and Philippines rather than on a direct route across the open Pacific. [Other records of large numbers of this species in the area tend to confirm this. Ed.]

MOVEMENTS OF WILSON'S STORM-PETRELS IN THE INDIAN OCEAN

During 1969, in July, August and September, Radio Officer W. F. Curtis undertook four passages between the Persian Gulf and Singapore, while Captain P. W. G. Chilman was on the same run in October. The most interesting observations were the records of Wilson's Storm-petrels *(Oceanites oceanicus)* close off the west coast of Southern India, south of Ceylon, and continuing towards the northern tip of Sumatra. In July flocks of 30 to 60 birds, and on one occasion south of Ceylon 160 were seen. Similar flocks were also seen in August including 180 off the west coast of Travancore, and 160 were seen in September by Radio Officer Curtis, and more by Captain Chilman's reports in October. This confirms former sightings and tends to indicate that birds from the Arabian Sea depart southward along the west coast of India to join birds from the Bay of Bengal in autumn as suggested in the past by Major W. W. A. Phillips (Journal of Bombay Natural History Soc: 53:132-133).

OTHER SPECIES

During these passages Wedge-tailed Shearwaters *(Puffinus pacificus)* were seen regularly and Red-billed Tropic-birds *(Phaethon aethereus)* chiefly far out to sea west of Ceylon. Captain Chilman who also visited ports on both coasts of India and the Hoogly River remarked upon the considerable number of Whiskered Terns *(Childonias hybrida)* in Columbo harbour during March and April.

SEA BIRDS OFF THE WEST COAST OF SPITSBERGEN

Between 25th May and 14th June, 1969, H.M.S. *Endurance* was at sea between 76°N, and 80°N, amongst pack ice west of

Spitsbergen during which Captain Buchanan recorded the following observations:

FULMAR PETRELS *(Fulmarus glacialis)*. Frequently seen over open sea and the pack ice. The majority were dark phase birds.

GULLS: Ivory Gull *(Pagophila ebwinia)*. Occasionally seen north of 79½° flying over pack ice singly or in groups of two or three. Great Black-backed Gull *(Larus marinus)*. The odd one was seen on pack ice north of 79½° amongst Glaucous Gulls. Glaucous Gull *(Larus hypoboreas)*. Very common north of 78° over open water near the coast and following the ship. Kittiwake *(Rissa tridactyla)*. Commonly seen throughout the area.

AUKS: Little Auk *(Plautus alle)*. Small flocks up to thirty birds over pack ice.

GUILLEMOT *(Uria sp.)*. Very common over pack ice in open pools. Less common within 30 miles of Spitsbergen. They seem likely to have been Brunnick's Guillemots *(Uria lomvia)* here. Black Guillemot *(Uria grylle)*. Very common in open pools.

PUFFIN *(Fratercula arctica)*. Occasionally seen off the coast. Only one seen over pack ice north of 79½°.

SKUAS. Four Arctic Skuas *(S. paraciticus)*, one Great Skua *(Stercorarius Skua)* and one Pomarine Skua *(S. pomarinus)* were seen at the edge of the pack ice at 79° north.

Photos by: Radio Officer E. L. Marchant

BLACK-HEADED GULL *(Larus ridibundus)*. Adult, autumn.
Note: White leading edge of wings. Pale grey mantle.

LAUGHING GULL *(Larus atricilla).* Adult, autumn.

NOTE: Conspicuous white trailing edge to wings. Dark mantle.

HERE AND THERE WITH THE BIRDS
From the Editor's Logbook

"I went to sea to see the world, and what did I see I saw the sea!" First line of a song some members may recall; but looking through the sea passages with which the observations in this volume are principally concerned one finds a rather different story. A few examples catch the eye. Very large concentrations naturally refer to estimated figures.

Consider Chief Officer D. M. Simpson's experience in the Western Pacific during 1968-69. On 28th April, 1968. Bangkok River, 1,000 White-winged Black Terns, and off the entrance to Bangkok River 50 Pomarine Skuas. On 20th February, 1969, in the region of the Coral Sea, 2,000 Wedge-tailed Shearwaters. On 27th March, 1969, off Tokara Is south of Kyushu I (Japan), 6,000 White-faced Shearwaters and 300 Brown Boobies. 8th April, 1969, 800 phalaropes sp. in the Moro Gulf, Mindanao. 2,000 Short-tailed Shearwaters flying in a northerly direction in the Bouganville Strait.

Captain P. W. G. Chilman makes these remarks in his report on 11th January, 1958, at 21°36′S, 12°26′E. "On this day a remarkable collection of birds occurred in the area over an oily patch, where

the Chief Officer saw a dead whale just below the surface. I estimated 50 Yellow-nosed and Black-browed Albatrosses, 300 Arctic Skuas, 100 Cory's Shearwaters and 40 Cape Gannets." Incidentally I noticed that Captain Chilman had observed 8 Pomarine Skuas at 31°45′S, 29°38′E, on rounding the Cape of Good Hope on 7th January, and later on 10th January at 27°29′S, 15°03′E, at least 50 Arctic Skuas. Captain Chilman has a happy knack of being in the right place at the right time, for on 10th July, 1969, at the approaches to Puerto Miranda, Venezuela, he estimated 2,000 Brown Pelicans and a similar number of Bigua Cormorants around the port. Later on 20th October, 1968, at 15°02′N, 51°33′E close off the south-east coast of Arabia he estimated 8,000 Phalaropes.

Radio Officer E. L. Marchant was able to confirm a wintering area of Pomarine Skuas, remarked upon during the previous year by Captain Chilman, for between 24th November, 1968, and 14th December, 1968, he observed at least 50 Pomarine Skuas extending from the Caribbean Sea into the Gulf of Mexico between 23°N, 89°W and 28°N, 87°W.

Captain J. K. Currie on passage from Cape Town to Las Palmas in November, 1969, had an unusual view of Wandering Albatrosses for he remarks. "On 3rd November, 1969, in position 31°S, 15°50′E I have never seen so many Wandering Albatrosses together. There were 100 to 150, many resting on the water as the ship approached, and some having great difficulty in becoming airborne, obviously gorged with food. Five stern trawlers were operating in the vicinity."

MANOEK ISLAND, 5°33′S, 113°18′E, JAVA SEA.

Manoek Island is well known throughout the China Navigation Company as "Bird Island," and on 23rd October, 1969, Chief Officer D. M. Simpson's ship, M.V. *Chengtu* (Captain Mallory) decided to investigate. Mr. Simpson's coloured photographs show the island rising steeply from the sea, the almost vertical sides to the skyline densely covered with tall trees and scrub against what appears to be a background of sandstone and shale. As the ship approached the tops of the trees were seen to be covered in white dots, but it was not until the syren was sounded that the situation became clear. In Simpson's words, "the whole sky around the island became swarming with Boobies and Frigate-birds like so many insects, with many more Boobies in thousands littering the trees like snow. We estimated that the total numbers could well have been eighty thousand, 90 per cent equally divided between Red-footed, and Brown Boobies, the remainder Frigate-birds. Red-footed Boobies were in both white and brown phases. Male Great Frigate-birds and a few female Lesser Frigate-birds were identified, the great majority of Frigate-birds were in immature plumage. To be sure of seeing these huge numbers it is necessary for a vessel to pass within one mile of the island and sound the syren."

MANX SHEARWATERS IN THE APPROACHES TO THE BLACK SEA

During the whole day of 13th May, 1970, Sub-Lieutenant D. Elliott, R.N., H.M.S. *Hermes* saw an enormous passage estimated at a

LANDBIRDS AT SEA

NORTH PACIFIC EAST – NORTH OF EQUATOR AND EAST OF 180° LONGITUDE

Panama to Japan	7 Nov	09°08'N, 98°58'W	1 Yellow-headed Blackbird *(Xanthocepalus xanthocepalus)*	Onboard
S.S. 'Voivatella'				
Capt. P.W.G.Chilman	8 Nov	09°31'N, 103°55'W	1 Sora Rail *(Porzana carolina)*	Adult, onboard
			2 Egrets sp.	
	9 Nov	10°08'N, 110°10'W	2 Barn Swallows	d.s. Onboard
	10 Nov	10°54'N, 117°35'W	1 Purple Martin *(Progne subis)*	Onboard. X.
			1 Zapata Rail *(Cyanolimnus ceverai)*	
	16 Nov	20°28'N, 155°04'W	1 American Golden Plover *(Chnadrius dominicus)*	d. SW
	25 Nov	33°32'N, 156°16'W	1 Duck sp.	Description identical with female Buffle-head Duck *(Glaucionelta albeola)*
S.S. 'Kenuta'	1968			
S.E.Chapman	13 Sept	03°54'N, 80°17'W	1 American Redstart *(Setophaga ruticilla)*	Caught onboard

SOUTH PACIFIC EAST – SOUTH OF EQUATOR AND EAST OF 180° LONGITUDE

Bonaventura to Matarani	1968			
S.S. 'Kentura'	19 Aug	10°25'S, 78°34'W	2 Hudsonian Whimbrel *(Numenius phaeopus)*	d. SE
S.E.Chapman				
	1 Sept	29°20'S, 71°43'W	1 Hudsonian Whimbrel	

RED SEA

Persian Gulf to Port Sudan	13 Oct	14°23'N, 42°33'E	1 Long-legged Buzzard *(Buteo rufinus)*	Onboard
S.S. 'Hydatina'			1 Buzzard *(Buteo buteo)*	Onboard
Capt. P.W.G.Chilman	14 Oct	19°21'N, 38°12'E	3 Swallows *(Hirundo rustica)*	
			1 Buzzard	Onboard, not interested in Swallows
			12 Swallows	

PERSIAN GULF – ARABIAN SEA

	8 Oct	26°44'N, 53°00'E	1 Wheatear *(Oenanthe oenanthe)*	Onboard
	10 Oct	19°42'N, 58°35'E	1 Hobby *(Falco subbuteo)*	Onboard
		Gulf of Oman		
	12 Oct	13°50'N, 48°57'E	1 Wheatear *(Oenanthe oenanthe)*	Onboard
			2 Swallows	
Singapore to Persian Gulf		13°36'N, 48°13'E	2 Nightjars *(Caprimulgus europaeus)*	1m, 1f.
	15 Nov	23°45'N, 59°34'E	1 Starling *(Sturnus vulgaris)*	Onboard
	18 Nov	Bandar Nahshahr	1 Song Thrush *(Turdus ericetorum)*	Killed. X.

INDIAN OCEAN

Mozambique Channel	4 April	off Mombasa	6 Red-necked Nightjars *(Caprimulgus ruficollis)*	
R.F.A. 'Tideflow'				
2nd. Off. W.C.W.Price	20 April	Mozambique Channel	1 Lilac-breasted Roller *(Coracias candata)*	In hand, onboard
	21 April	„ „	1 Nightjar *(Caprimulgus europaeus)*	Onboard one hour. Later 2 Nightjars
			3 Cattle Egrets *(Ardeola ibis)*	Onboard 30 minutes
	25 April	„ „	1 Yellow-billed Egret *(Egretta flavirostris)*	Onboard one hour
Port Sudan to Singapore	29 Oct	16°40'N, 67°52'E	1 White Wagtail *(Motacilla alba)*	Onboard occasionally
S.S. 'Hydatina'		15°35'N, 68°56'E	2 White Wagtails	d. ESE
Capt. P.W.G.Chilman				

WEST PACIFIC – EAST INDIES

Port Moresby to Honiara	28 Jan	10°17'S, 151°24'E	1 Osprey *(Pandion haliatus)*	Attempted to land onboard
M.V. 'Chengtu'		off S. of New Guinea		
Chief Off. D.M.Simpson		Solomon Sea		
Kobe to Hong Kong	26 Mar	32°33'N, 133°11'E	1 House Martin *(Delichon urbica)*	d. W
		13 m.off Shikoku Is.		
	28 Mar	27°45'N, 125°20'E	1 Black-crowned Night Heron *(Nycticorax nycticorax)*	Flew close to ship for one hour. d.N.
		150m. NW of Okinawa	2 Grey Starlings *(Sturnus cineraceus)*	
		24°05'N, 119°06'E		
		Taiwan Strait	20 Barn Swallows *(Hirundo rustica)*	Aboard in parties
			3 White Wagtails *(Motacilla alba)*	Onboard
		23°28'N, 118°04'E	1 Cattle Egret *(Ardeola ibis)*	
		20m.off coast of China		
	5 April	19°41'N, 115°31'E	200 Barn Swallows	Parties up to 20 arriving during day, d.N. and NW, strong NE Monsoon as on 5 April . d.N
			1 Cattle Egret	
	6 April	17°05'N, 118°39'E	50 Barn Swallows	
	8 April	06°03'N, 123°53'E	5 Barn Swallows	
	16 April	06°34'S, 149°10'E	4 Sacred Kingfishers *(Halcyon sanctus)*	Perched onboard
		30 miles off New Britain	3 Forest Kingfishers *(Halcyon macleayi)*	Perched onboard

Malta to Cyprus H.M.S. 'Bulwark' Cdr. Baker Lt.Cdr. Locke P.J.Newbound	24 April to 25 April	From 36°N, 19°E To 34½°N, 28°E		2 Blue-headed Wagtails *(Motacilla flava flava)* 2 Turtle Doves *(Streplopelia turtur)* 2 Swift *(Apus apus)* 5 Swallows 2 House Martins 1 Whinchat *(Saxicola rubetra)* 1 Phylloscopus Warbler sp. 1 Hippolais Warbler sp.	All birds aboard for various periods vis. 5-10 miles
Cyprus to Malta	May 4	35°N,20°30′E to 35°N,18°30′E	0800hrs 1300hrs	1 Wood Sandpiper *(Tringa glareola)* 1 Wheatear *(Oenanthe oenanthe)* 4 Blue-headed Wagtails 1 Ruff *(Philomachus pugnax)* 1 Kestrel *(Falco tinnunculus)* 1 Tree Pipit *(Anthus trivialis)* 1 Spotted Flycatcher *(Muscicapa striata)* 1 Woodchat Shrike *(Lanias senator)* 1 Turtle Dove 1 Swallow 1 Phylloscopus Warbler sp.	All birds aboard for various periods vis. 3-5 miles
Malta to Cyprus	15 May			2 Blue-headed Wagtails 2 Tree Pipits 1 Turtle Dove	Onboard Onboard Onboard
off Cyprus	28 May			1 Nightjar *(Caprimulgus europaeus)* 1 Turtle Dove 1 Olivaceous Warbler *(Hippolais pallida)*	Onboard. Sea fog

LANDBIRDS AT SEA

EASTERN NORTH ATLANTIC – EAST OF 30°W

Liverpool to San Juan, P.R. S.S. 'Kenuta' S.E.Chapman	1968 28 July	50°15'N, 11°46'W	1 Sedge Warbler *(Acrocephalus schoenobaenus)*	Onboard
Puerto Miranda,Venezuela to Rotterdam. S.S. 'Vibex' Capt. P.W.G.Chilman	20 Aug	48°29'N, 10°18'W 49°04'N, 07°25'W	2 Turnstone *(Areneria interpres)* 1 Sanderling *(Crocethia alba)*	Onboard d. S. onboard
Singapore to Hamburg M.V. 'Pembrokeshire' Capt. A.J.Palmer	27 Sept	13°23'N, 17°36'W 47 miles from Gambia	6 Turtle Doves *(Streptopelia turtur)*	Onboard 2 hours, flying about, finally could not keep up, ship at 22 knots.
Panama to Dublin S.S. 'Kenuta' S.E.Chapman	25 Sept 27 Sept	46°23'N, 29°39'W 420 miles N of Azores 51°00'N, 10°40'W 40 miles WSWMizzen Head. Eire.	1 Snow Bunting *(Plectrophenax nivalis)* 1 Snow Bunting	d. S.E. onboard
Exercise area H.M.S. 'Hecla' Lt.Cdr. R.A.Wilson. RN. off Rockall Bank	18 Oct 23 Oct 24 Oct 25 Oct 29 Oct Nov 11-14	56°20'N, 09°00'W off Rockall Bank .. .. 58°15'N, 13°14'W	1 Redshank *(Tringa totanus)* Redwings *(Turdus musicus)* Redwings 1 Redwing 1 Common Scoter *(Melanitta nigra)* 2 Redwings 3 Starlings *(Sturnus vulgaris)*	Onboard Flying alongside, identified in searchlight Onboard Close alongside Onboard Roosting onboard
Liverpool to Panama S.S. 'Kenuta' S.E.Chapman	7 Nov 8-10 Nov	51°49'N, 06°36'W 48°02'N, 14°27'W to 43°20'N, 28°00'W	1 Song Thrush *(Turdus ericetorum)* 2 Starlings *(Sturnus vulgaris)* 2 Starlings	About ship Feeding around horse boxes

1969 BARENTS SEA/BEAR ISLAND

D.E.Trawler 'Kirkella' L. Mansell Davies	30 May 4 June 10 June	71°06'N, 29°30'W 74°00'N, 16°30'E 73°30'N, 15°50'E	1 Brambling *(Fringilla montifringilla)* 2 Snow Buntings *(Plectrophenax nivalis)* 3 Turnstones *(Areneria interpres)* 4 Ringed Plovers *(Charadrius hiatacula)*	Onboard 24 hours, fed on "Swoop" seed Onboard, fed on "Swoop" seed Onboard 24 hours Found dead onboard after 24 hours

1968 WESTERN NORTH ATLANTIC – WEST OF 30°W AND NORTH OF 30°N

Curacoa to New York S.S. 'Vibex' Capt. P.W.G.Chilman	21 May	30°00'N, 70°38'W 650 miles E of Florida	1 Semi-Palmated Sandpiper *(Calidris pusilla)*	Onboard 24 hours. X.
		31°30'N, 71°15'W	1 Yellow-billed Cuckoo *(Coccyzus americanus)*	d. ENE
	22 May	36°59'N, 72°46'W 300 miles E of S.Carolina	1 Great Blue Heron *(Ardea herodias)*	d. NNW
	23 May	Entrance to New York	3 Rusty Blackbirds *(Euphagus carolinus)* 2 Barn Swallows *(Hirundo rustica)*	
	23- 28 May	Birds listed in Hudson River area NOT INCLUDED		
	28 May	36°42'N, 72°56'W	1 Barn Swallow	
	14 Aug	30°56'N, 50°10'W	1 Northern Water Thrush *(Seiurus noveboracencis)*	Onboard, probably blown off course
	15 Aug	34°48'N, 44°52'W Mid North Atlantic	1 Swallow *(Hirundo rustica)*	Onboard. Wind WSW 4
Liverpool to San Juan,P.R. S.S. 'Kenuta' S.E.Chapman	5 Aug	4 miles E of Bermuda	4 Swallows	Flying about ship 20 minutes.

WESTERN NORTH ATLANTIC – WEST OF 30°W AND SOUTH OF 30°N (Excludes Caribbean area)

Liverpool to San Juan, P.R. S.S. 'Kenuta' S.E.Chapman	6 Aug	28°09'N 65°00'W	5 Barn Swallows	Onboard 24 hours
Gambia to Curacoa S.S. 'Volvatella' Capt. P.W.G.Chilman	1967 24 Oct 1968	07°03'N, 52°49'W	1 Barn Swallow	Onboard

CARIBBEAN AREA

	3 June	10°26'N, 64°45'W	1 Yellow Warbler *(Dendroica petechia)*	Onboard. X.
			1 Cayenne Nighthawk *(Caprimulgus cayennensis)*	m. Onboard
	8 Aug	11°14'N, 71°28'W	1 Osprey *(Pandion haliaetus)*	
			2 Turkey Vultures *(Cathartes aura)*	
	10 July	Puerto Miranda	3 Snowy Egrets *Egretta thula)*	
			2 Tricoloured Herons *(Hydranassa tricolor)*	
	11 July	12°15'N, 68°32'W	2 Bare-eyed pigeons *(Columba corensis)*	
Cristobal to Dublin S.S. 'Kenuta' S.E.Chapman	15 Sept	35m N of Panama Coast	1 Yellow-throated Warbler *(Dendroica dominica)*	Onboard
			1 Prothonotary Warbler *(Protonotaria citrea)*	Onboard
	15 Sept	10°38'N, 78°24'W	1 American Redstart *(Setophaga ruticilla)*	Onboard. X.
			1 Willet *(Catoptrophorus semipalmatus)*	
Bermuda to Cristobal S.S. 'Kenuta' S.E.Chapman	25 Nov	20°33'N, 67°33'W	1 American Egret *(Egretta alba)*	Around ship
			30+ Myrtle Warblers *(Dendroica coronata)*	d. SSW
	26 Nov	12°09'N, 76°28'W	3 Myrtle Warblers	Onboard, feeding among hay and fodder
	30 Nov	05°36'N, 77°47'W	2 American Egrets	
			4 Barn Swallows *(Hirundo rustica)*	
			1 Grey Kingbird *(Tyrannus dominicensis)*	Onboard, large insect in bill
			29 Egrets sp.	Uncertain sp. but thought to be Cattle Egrets
			1 Osprey *(Pandion haliaetus)*	Landed on f'mast, 1 hour. *(Ardcola ibis)*
	11 Aug	12°04'N, 71°13'W	1 Black necked Stilt *(Himantopus himantopus)*	Close around ship
			1 Barn Swallow	About ship
M.V. 'Anat' Rad.Off. E.L.Marchant	1969 22 May	off Galveston	1 Yellow-billed Cuckoo *(Coccyzus americanus)*	Onboard
S.S. 'Oronsay' Lt. N.R.Messinger RNR	31 Jan	13°49'N, 77°43'W	1 Cattle Egret *((Ardcola ibis)*	Around ship one hour

total of some 31,000 Manx Shearwaters *(Puffinus p. yelkouan)* passing southward through the Dardanelles. At the height of the movement the birds were passing at over 300 per minute in groups of up to 50. It was not possible to take count of continued movements during dark hours. [On 26th May the Editor, who happened to be at Istanbul, noticed a steady southward movement of flocks through the Bosphorus. Ed.]

EXTRACTS FROM SOME FURTHER REPORTS IN 1970

In early February, 1970, Chief Officer Simpson counted 30 mixed Arctic and Pomarine Skuas off the coast of New South Wales, up to 40 in Port Phillip Bay and later possibly 100 off the eastern approaches to the Bass Strait. On 26th February, 600 Northern Rednecked Phalaropes were seen in the Sula Sea. Chief Officer Salwegter has also added much information of wintering areas of this species throughout the East Indies.

Radio Officer Curtis confirms identification of White-bellied Storm-petrels *(Fregetta grallaria)* in early July both south and north of Socotra Island (Indian Ocean).

SOOTY AND WHITE CHEEKED TERNS NESTING ON ISLAND OFF EAST COAST OF OMAN—1970

Lieutenant R. A. Smith, R.N., visited Daimaniyat Island off the east coast of Oman in the approaches to the Persian Gulf in July and estimated 1,000 Sooty Terns *(Sterna fuscata)* with eggs and young, and 1,000 White-cheeked Terns *(Sterna repressa)* nesting. Many Aden Gulls *(Larus hemprichi)* in full breeding plumage were also present but no nests found.

A HUNDRED YEARS AGO—ALBATROSSES IN THE NORTHERN HEMISPHERE

Extract from the daily Log of one GEORGE MANSFIELD, Ship's carpenter of the Barque *"Lady Heathcote"* on passage southwards.

"Friday, 11th December, 1868. Day commences with fine clear weather. All sail set. A large number of Grampus about the ship. Also we saw some Albatrosses for the first time. Saturday, 12th December, commences with squalls. 8 a.m. took in Royals and Flying Jib. Noon, fine, set all sail, Lat 1°37′N, 25°13′W." [Albatrosses are not easy to mistake. His comment "for the first time" suggests that he had seen Albatrosses before on other voyages elsewhere. Ed.]

SOME RECENT REVISIONS OF THE CLASSIFICATION OF SEABIRDS

By W. R. P. Bourne

In the early days of ornithology a great deal of confusion was caused by the fact that many different seabirds were described under different names from different parts of the oceans, while in other cases two or more species were also confused and described under the same name. Most of the more important cases of confusion have long been sorted out, but a few persist, mainly as a result of the use of the same vernacular names for different species in different parts of the world, while a trickle of new discoveries continue to be made, and it may be useful to list the more important recent amendments to the usage found in the best list of seabirds currently available, the revised (1955) edition of W. B. Alexander's "Birds of the Ocean."

If we consider the systematic list of species at the back, the Snares Penguin *Eudyptes robustus* (a name which takes precedence over *E. atratus* sometimes used in the past) has recently been separated from the Victoria or Crested Penguin *Eudyptes pachyrhynchus* of the rest of New Zealand by Bernard Stonehouse (Ibis 113:1-7) because of its larger bill, with pink and not grey skin at the corner of it, darker cheeks, and a narrower but brighter superciliary crest with a more bushy end; it breeds at the Snares Islands further south and wanders to nearby parts of New Zealand. John Warham and I (Ardea 54:45-67) have also divided the Giant Petrels into two species, the familiar southern form *Macronectes giganteus* which usually has a green bill and is polymorphic with a white phase and a paleheaded dark phase and breeds around Antarctic, and the Northern Giant Petrel *Macronectes halli* which usually has a yellow-brown bill with dark marks at the tip, and only occurs in the dark phase, which is browner with a contrasting pale face, and breeds at the more northerly subantarctic islands including Gough Island, Marion, the Crozets, Kerguelen, Macquarie, Campbell, the Aukland, Antipodes, and Chatham Islands, and Stewart Island, New Zealand, overlapping with the Southern Giant Petrel at least at the Crozets and Macquarie. R. A. Falla (Records of the Canterbury Museum 5:111-113) has also separated the Black Petrels of New Zealand into two species which differ mainly in size and breeding season, a smaller one, sometimes called Parkinson's Petrel *Procellaria parkinsoni* which breeds fairly widely in the summer, and a larger one, the Westland Petrel *Procellaria westlandica* which breeds on the west side of South Island in the winter.

These divisions involve closely similar related forms in limited areas; a more confusing situation is found with the black and white Manx and Little Shearwaters and their allies. First, all the larger species, including the Manx, Fluttering, Black-vented and Townsend's Shearwaters *Puffinus puffinus, P. gavia, P. opisthomelas* and *P. auricularis* were united into one species under the first name by R. C. Murphy (American Museum Novitates 1586), but it has since been shown by G. Harrow (Notornis 12:59-65) and others that in point of fact two rather distinct representatives, the Fluttering Shearwater *P. gavia,* which is rather brown above, and Hutton's Shearwater *P. huttoni,* which is darker above with flecks on the axillaries and

lateral under-tail-coverts and a more slender bill, breed in much the same area in New Zealand, and both these are probably best treated as separate species from the northern Manx Shearwaters. On the other hand, it may be noted that the Persian Shearwater *Puffinus persicus* of the Arabian Sea is now usually regarded as a race of Audubon's Shearwater *Puffinus l'herminieri* (W. W. A. Phillips and R. W. Sims, Journal of the Bombay Natural History Society 55: 195-207) and not as a separate species at all.

Among the Gadfly Petrels of the genus *Pterodroma*, it may be noted that the Jamaica Petrel *Pterodroma caribbaea* is now usually regarded as an extinct dark race of the Capped Petrel *Pterodroma hasitata*, now known still to breed in fair numbers in Hispaniola (D. B. Wingate, Auk 81: 147-159), Beck's Petrel *P. becki*, still only known from two specimens taken north of the Solomons, is usually regarded as a small race of the Tahiti Petrel *P. rostrata*, the Herald Petrel *P. heraldica* is usually regarded as a small Pacific race of the Trindad Petrel *P. arminjoniana* (R. C. Murphy and J. M. Pennoyer, American Museum Novitates 1580) and the Collared Petrel *P. brevipes* is regarded as a melanistic central Pacific race of Gould's Petrel *P. leucoptera* (R. A. Falla, Emu 42: 111-118). On the other hand, there is a growing impression that the three races formerly often classified as forms of Bonin Petrel, *P. hypoleuca*, the true Bonin Petrel of the North Pacific, the Black-winged Petrel *P. nigripennis* of the Kermadec area, and the Chatham Petrel *P. axillaris*, are probably best treated as separate species, the last two of which are now known to nest together in the Chatham Islands. The Magenta Petrel *P. magentae*, a large brownish species with a white chin and belly, still only known from one specimen from the South Pacific though it may once have bred in the Chatham Islands (Notornis 11: 139-144), and Barau's Petrel *Pterodroma barau*, a small but otherwise rather similar relative of the White-necked Petrel *P. externa* nesting on Réunion in the Indian Ocean (C. Jouanin and F. B. Gill, Oiseau 37: 1-19) now also need to be added to the list of members of this genus. It may also be noted that the Réunion Petrel *P. aterrima* has also recently been found again on that island but that old records from the Arabian Sea were due to confusion with another new species, Jouanin's Petrel *Bulweria fallax*, a larger but otherwise similar Indian Ocean representative of Bulwer's Petrel *Bulweria bulwerii* of the north Atlantic and Pacific (C. Jouanin, Oiseau 27: 12-27, 40: 48-68).

Among the storm-petrels, the Striped Storm-petrel *Fregetta lineata* and the Samoan Storm-petrel *Nesofregetta moestissima* are now known to be dark forms of the Black-bellied and White-throated Storm-petrels *Fregetta tropica* and *Nesofregetta albigularis* respectively (R. C. Murphy and J. P. Snyder, American museum Novitates 1596), though the correct scientific name for the latter species is *Nesofregetta fuliginosa* (Gmelin) (Bulletin of the British Ornitholigists) whereas the Sooty Storm-petrel *Oceanodroma markhami* is now thought to include two additional species, Markham's Storm-petrel *O. markhami* itself being restricted to the cool waters off the west coast of South America, while it is replaced by two closely-allied species, a brown warm-water form Matsudaira's Storm-petrel *O. matsudairae*, and a bluer-black cool-water one Tristram's Storm-petrel *O. tristrami*, in the north-west Pacific. Both of them breed

in the area south of Japan and Tristram's Storm-petrel in the Hawaiian leeward islands as well, while Matsudaira's Storm-petrel migrates south into the Indian Ocean and Tristram's Storm-petrel north towards Japan (O. L. Austin, Bulletin of the Museum of Comparative Zoology, Harvard 107: 391-407).

Among the Cormorants, the Common Cormorant *Phalacrocorax carbo* and its African representative the White-throated Cormorant *P. lucidus* are probably best treated as separate species since they have now both been found breeding in the same area in East Africa (J. G. Williams, Bulletin of the British Ornithologists' Club 86: 48-50). Among the gulls, the Yellow-legged Gull *Larus cachinnans* is now usually treated as a race of the Herring Gull *L. argentatus,* but another form treated as a race in the past, Thayer's Gull *L. thayeri* which breeds in Baffin Land, is now treated as a separate species, *L. thayeri,* which differs from it mainly in the colour of its eye-ring and iris, though it also has less black on the wing-tip (N. G. Smith, American Ornithologists' Union Monograph 4). Small numbers of another lost species of Black-headed Gull, *Larus relictus,* have also been found breeding again recently on Lake Alakul in Kazakhstan, central Asia (E. L. Gavrilov and I. F. Borodchin, Ring 63: 38-40), though a full account has not been published yet; it seems rather doubtful if many people are likely to meet it.

While strict laws of zoological nomenclature are supposed to govern which scientific name takes precedence for which species it is sometimes a while before popular usage catches up with the latest views on the subject, while so far there is no accepted means of determining correct usage for vernacular nomenclature. Dealing with scientific names first, it is now usually held that the Kermadec Petrel should be called *Pterodroma neglecta,* not *P. phillipii* as in "Alexander," and that Macgillivray's Petrel *P. macgillivrayi* also belongs in that genus and not *Bulweria;* likewise that the Mediterranean or Cory's Shearwater *Puffinus kuhlii* should be called *Calonectris diomedea,* sharing a distinct genus *Calonectris* with one close ally the White-faced or Streaked Shearwater *Calonectris* (or *Puffinus*) *leucomelas* (N. Mayaud, Alauda 4: 41-78; Ibis 107: 401-405). Confusion is much worse among vernacular names, which often cover a variety of different White or Love Terns and Black Cormorants or Shags in different parts of the world. Personally I am unable to chart a straight course among most of them, and recommend the usage in "Alexander," with two notable exceptions; it seems confusing to have two species locally called "Black Petrel" in both New Zealand and California, and it might be better to use the name "Parkinson's Petrel" in the first case and "Black Storm-petrel" in the second, while as mentioned earlier, the name "Sooty Storm-petrel" is used for three distinct species by Alexander (and was orginally applied to a fourth, his Samoan Storm-petrel), so it might be better if it was discarded altogether, before it leads to further confusion with Sooty Shearwaters.

NEW MEMBERS

1969

Flook, R. E., 2nd Electrical Officer, R.F.A. Stromness
Leathes, R. E. de M., Captain, R.N., H.M.S. Nubian
McKay, The Rev. R. J., Ex R.N.
Owens, J. H., 2nd Officer, M.N., R.M.S. Andes
Salwegter, K., Chief Officer, Royal Netherlands Mercantile Marine
Selby-Smith, G. H., Ex. Lieut. R.C.N.R., R.R.S. Discovery
Tall, J., Lieutenant R.N., H.M. Submarine Finwhale

1970

Booth, J., Seaman, Grade 1., M.V. Baknes
Ferrie, R. M., 2nd Officer, Ocean Weather Ship
Gray, R., Instructor Lieutenant R.N., R.N. *College*, Manadon
Hall, I. G., Able Seaman, R.F.A. Olmeda
Jackson, R. F., Captain M.N., M.V. *Oridian*
Scott-Dickins, H. F., Captain M.N., M.V. British Unity
Walling, W. J., Commander R.N.

CORPORATE MEMBERSHIP

Six Coastal Minesweepers of the Fishery Protection Squadron, H.M.S. Lochinvar.

R.N.B.W.S. REPRESENTATIVES OVERSEAS

R.N.B.W.S. will always welcome offers from Ornithologists resident overseas, particularly in the vicinity of Ports, willing to act as R.N.B.W.S. representatives to whom R.N.B.W.S. members could refer for local information.

AUSTRALIA

Western Australia—
Julian Ford, 7 Pinner Place, Lynwood, Western Australia.
Victoria (Melbourne)—
Roy Wheeler, 59A Upton Road, Windsor, Phone 51, 6331 (Bird Observers Club, R.A.O.U.)
New South Wales—
J. D. Gibson, 12 Redman Avenue, Thirroul (R.A.O.U.).

BERMUDA

Roger Pocklington, Bermuda Biological Station for Research, Bermuda.

CANADA

Dr. Eric L. Mills, Asst. Professor, Dept. of Biology, Institute of Oceanography, Dalhousie University, Halifax, Nova Scotia.

DENMARK

Lektor Hans Hvass, M.Sc., Grondalsvej 53, Copenhagen (Hon. Member, R.N.B.W.S.).

HOLLAND

Professor Dr. K. H. Voous, Zoological Museum, Plantage Middenlaan, 53, Amsterdam (C) (Hon. Member, R.N.B.W.S.)

Dr. J. Wattel, Zoological Museum, Amsterdam.

HONG KONG

R. E. Hale, Hon. Sec., Hong Kong Birdwatching Soc., c/o Hong Kong and Shanghai Banking Corporation, 1 Queens Road, Hong Kong.

NEW ZEALAND

Dr. R. A. Falla, C.M.G., M.A., Dr.Sc., Katari Road, Days Bay, Eastbourne, N.Z. (Hon. Member, R.N.B.W.S.)

F. C. Kinsky, Dominion Museum, Wellington, C3, N.Z.

PERSIAN GULF

Major A. W. A. Hazeldon, Royal Marines, H.M.S. *Jufair,* Bahrain.

SOUTH AFRICA

Professor J. M. Winterbottom, Director, Percy FitzPatrick Institute of African Ornithology, University of Capetown, Rondersbosk, Cape Province.

TASMANIA

D. G. Thomas, 9 Lallaby Road, Moonah, Tasmania (4 miles from Port of Hobart) (President, Tasmanian Field Naturalists Club).

U.S.A.

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Lieut. Commander R. Stackpole, U.S.N.R., Normandy, Ocean Avenue, Newport, R.I. (Member N.N.B.W.S.)

WEST INDIES

Dr. C. B. Lewis, O.B.E., Director and Curator, the Science Museum, Institute of Jamaica, Kingston, Jamaica (Hon. Member, R.N.B.W.S.)

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(Names of contacts in brackets)

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Redpath Museum, McGill University Library, Montreal.
University of British Columbia, Vancouver (Dr. Bernard Stonehouse).

FRANCE—
Museum of Natural History, Paris (Monsieur Jouanin).

FEDERAL REPUBLIC OF GERMANY—
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HOLLAND—
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Zoological Museum, University of Amsterdam (Dr. K. H. Voous) (Dr. J. Wattel).

HONOLULU—
Berenice P. Bishop Museum.

NEW ZEALAND—
University of Canterbury, Christchurch (Dr. John Warham).

U.S.A.—
The American Museum of Natural History, New York (Librarian)
Peabody Museum, Yale, New Haven, Connecticut (Dr. Ripley).
Smithsonian Institution, Division of Birds, Washington, 25, D.C. (Dr. George E. Watson, Mr. Patrick J. Gould).
University of California, Los Angeles (Biochemical Library, Centre of Health Services).
Alfred O. Gross Library of Ornithology, Bowden's College, Brunswick, Maine.
Library Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts.

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THE ROYAL NAVAL BIRD WATCHING SOCIETY

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 30TH NOVEMBER 1969

1968			£ s d	1968
258. 0. 9.		Balance 1st December 1968		
		Cash at Bank	457.12.11	- - -
		Subscriptions		
		Current Year		
	47.12. 0	Under Covenant	41. 9.10.	
	82.18.10	Other	92. 7. 4.	
	4.15. 0.	Arrears	4.10. 0.	15.14. 0.
140. 0.10.	4.15. 0.	In Advance	9. 5. 0.	7. 4. 0.
15.18. 0		Donations	11.18. 6.	24. 9. 6.
		Income Tax receovered on member's covenanted subscriptions and donations year to 5th April 1968 (See Note 1)	35.16. 2.	35. 7. 3.
16. 9. 1.				4.12. 0.
- - -		Interest on Investment (net) (see Note 2)	10.16. 4.	1. 6. 0.
			- - -	- - -
		Other Receipts		200. 0. 0.
33.12. 4.		Sale of Sea Swallow	119. 5. 8.	
34.17. 9.		Sale of Christmas Cards 1968	37. 4. 0.	457.12.11.
(1968 and earlier years) 143. 1.11.		Sale of Sea Birds of the South Pacific	4. 1. 8.	
4. 5. 0.		Sale of Members Ties	3. 0. 0.	
- - -		Refund of Stamp Duty on unused cheques	2.10.	
100. 0. 0.		Grant in Aid from the Royal Society for Improvement of Sea Swallow	- - -	
£746. 5. 8.			£827.10. 3.	£746. 5. 8.

			£ s d
		Production of Sea Swallow Vol.19 (1967) (700 copies)	301. 5. 6.
		Printing	
3. 6. 0.	3. 5. 6.	R.N.B.W.S. Letter heads (1000)	
1. 4. 0.	1. 4. 0.	Minutes of 1968 A.G.M.	
10.15. 0.	7.15. 0.	Bulletins 71 and 72	
9. 0.		Compliment Slips	12. 4. 6.
		Expenses of A.G.M. 1968	6.16. 0.
		Postage and Stationery	32. 9. 0.
		Production Cost of 1969 Christmas Cards	49.18. 9.
		Subscriptions	
2.10. 0.	2.10. 0.	British Trust for Ornithology	
2. 2. 0.	2. 2. 0.	I.C.B.P. (British Section)	4.12. 0.
		Bank Charges	1. 1. 0.
		Audit Fee 1968	10. 0. 0.
		Cost of Investment (See Note 4)	- - -
		Balance 30th November 1969	
		Cash at Bank	409. 3. 6.
			£827.10. 3.

NOTES:

1. Refund of Income Tax at 8/3 amounting to £35.19. 8. re the covenants of 67 members and donations for the year 1968/69 is at present in the hand of the Inland Revenue.
2. A refund of Income Tax deducted from the interest on investment £7.12.0. will be claimed
3. No entries are included in these accounts in respect of sale of 1969 Christmas Cards.
4. In addition to Cash at Bank the assets of the Society include £206.11.6. Greater London 7¼% Stock 1977 (purchased 4.6.68.)

I have examined the above account with the books and records of the Society and certify that it is in accordance therewith.

Costards,
West Lavington, Sussex.
5th. December, 1969

(Signed) F.C.A.
Honorary Auditor

THE ROYAL NAVAL BIRD WATCHING SOCIETY

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 30TH NOVEMBER 1970

1969				£ s d	1969			£ s d
		Balance 1st December 1969					Production of Sea Swallow Vol.20 (1968) (700 copies)	327.14. 6.
457.12.11		Cash at Bank		409. 3. 6.			Printing	
		Subscriptions				3. 5. 6.	R.N.B.W.S. Letter heads (1000)	- - -
		Current Year					Sea Report Sheets (Census, Land	
	41. 9.10.	Under Covenant	42.12. 8.			- - -	birds and birds in hand, (500 each)	11.10. 0.
	92. 7. 4.	Other	78.16. 6.			1. 4. 0.	Minutes of 1969 A.G.M.	2. 4. 0.
	4.10. 0.	Arrears	5.10. 0.			- - -	Audited Statement 1969	1. 1. 0.
147.12. 2.	9. 5. 0.	In Advance	7.13. 0.	134.12. 2.	12. 4. 6.	7.15. 0.	Bulletins 73-75	14.10. 6. 29. 5. 6.
11.18. 6.		Donations		17.17. 6.	6.16. 0.		Expenses of A.G.M. 1969	6. 0. 0.
		Income Tax recovered on members covenanted subscriptions, donations			32. 9. 0.		Postage and Stationery	35.10. 4-
35.16. 2.		year to 5th April 1969 (see Note 1)		35.19. 8.	49.18. 9.		Production Cost of 1970 Christmas Cards	46.12. 0.
10.16. 4.		Interest on Investment (net) (see Note 2)		8.16. 0.			Subscriptions	
		Other receipts				2.10. 0.	British Trust for Ornithology	2.10. 0.
					4.12. 0.	2. 2. 0.	I.C.B.P. (British Section)	2. 2. 0. 4.12. 0.
119. 5. 8.		Sale of SEA SWALLOW		120.17. 9.	1. 1. 0.		Bank Charges	1. 6. 0.
37. 4. 0.		Sale of Christmas Cards 1969 (see Note 3)		36. 9. 2.	10. 0. 0.		Audit Fee	- - -
4. 1. 8.		Sale of 'Sea Birds of the South Pacific'		3. 2. 0.			Balance 30th November, 1970	
3. 0. 0.		Sale of Members' Ties		3. 3. 4.	409. 3. 6.		Cash at Bank	319. 0. 9.
2.10.		Refund of Stamp Duty on unused cheques		- - -				
£827.10. 3.				£770. 1. 1.	£827 10. 3.			£770. 1. 1.

NOTES:

1. Refund of Income Tax at 8s.3d. amounting to £34.15.2. re the covenants of 62 members' subscriptions and donations for year 1969/70 is at present in the hands of the Inland Revenue.
2. A refund of Income Tax deducted from the interest on investment of £13.15.6. will be claimed.
3. No entries are included in these accounts in respect of Sale of 1970 Christmas Cards.
4. In addition to cash at Bank the assets of the Society include £206.11.6 Greater London 7¼% Stock 1977.

I have examined the above account with the books and records of the Society and certify that it is in accordance therewith.

Costards
West Lavington, Sussex.

1st December, 1970.

(Signed) F.C.A.
Honorary Auditor